DOCUMENT RESUME

ED 235 775 IR 010 845

AUTHOR	Alfian; And Others
TITLE	Mass Media and Development in Indonesia.
INSTITUTION	Hawaii Univ., Honolulu. East-West Center.
PUB DATE	Jan 82
NOTE	170p.; Funded largely by grants from the Indonesian Department of Information.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Agriculture; Citizen Participation; *Developing Nations; *Mass Media Effects; Media Research; Programing (Broadcast); *Rural Development; Surveys; *Technological Advancement; Technology Transfer; *Telecommunications; *Television Viewing
IDENTIFIERS	*Indonesia

ABSTRACT

A large-scale pre-television benchmark survey was undertaken in five Indonesian provinces in 1976, prior to the launching of Indonesia's telecommunications satellite, to provide data for comparison with the results of a survey of the same villages to be carried out in 1982, 5 years after the introduction of television, to assess its long-term social impact on rural Indonesia. The focus of this research is how television contributes to the acquisition of knowledge and technology, new attitudes and behavioral orientations, new aspirations and role expectations, and to the adoption of agricultural innovations, health and hygienic practices, and community participation. This collection of technical reports is based on findings from the entire sample. Preliminary chapters cover the study setting, sample selection and rsearch methods, and provide an in-depth analysis of the use of mass media by the survey respondents. Remaining chapters then analyze the relationship between mass media usage and values and aspirations, economic behavior, knowledge of agricultural technology and adoption of innovative farming practices, knowledge and practice of family planning, adoption of new health practices, participation in community life, ethnic relations, and knowledge about development programs. A final chapter summarizes conclusions from the benchmark survey and assesses the impact which might be expected from television's advent. (LMM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED235775

MASS MEDIA AND DEVELOPMENT IN INDONESIA

Alfian
S. Budhisantoso
Godwin Chu
Jack Lyle
Wilbur Schramm

LEKNAS/LIPI

EAST-WEST CENTER • Communication Institute

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Sandra E. Ward

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR010845

LEKNAS/LIPI

The Indonesian Institute of Sciences, abbreviated as LIPI, is a part of the Indonesian Government which provides guidance in the field of scientific and technological research. It reports directly to the President of the Republic of Indonesia.

The creation of LIPI is aimed at obtaining maximum efficiency and effectiveness in carrying out scientific and technological research for the welfare of mankind in general and the Indonesian nation in particular. The main tasks are: to promote the development of sciences and technology in Indonesia for the benefit of mankind in general and of the Indonesian people in particular; to search for scientific truth, while scientific freedom, the freedom of conducting research, and academic freedom are recognized and guaranteed within LIPI insofar as it is not in contradiction with *Pancasila* and the 1945 Constitution.

In order to accomplish these tasks, LIPI is assigned the following functions: to advise the Government on the formulation of a national science policy (as part of the overall national policy); to give guidance to research institutions and to develop existing technological activities; to guide researchers toward a higher sense of awareness and responsibility to facilitate rapid development of science and technology in Indonesia; to encourage and develop science-mindedness among the Indonesian people; to conduct and maintain relations and cooperation with international—as well as national—scientific bodies in accordance with existing regulations.

Accordingly, LIPI is authorized to coordinate, integrate and synchronize all activities in the field of science and technology at both the national and regional level.

LIPI has ten national research institutions situated in Jakarta, Bogor, and Bandung which are conducting research in the natural, technological, social sciences and humanities. In addition to these institutions there are a National Scientific Documentation Center and other units.

LEKNAS/LIPI (The National Institute of Economic and Social Research) is one of the ten research institutions under LIPI. This Institute conducts research in economic and social fields in general with the aim of obtaining data needed in planning Indonesia's economic and social development and population programs. In addition, the Institute takes on ad hoc tasks to give advice on development related programs that require immediate solution.

Indonesian Institute of Sciences,
National Institute of Economic and
Social Research (LEKNAS/LIPI)

Copyright © 1982 The East-West Center

This material is based on a survey supported by the Indonesian Department of Information. Any opinions, findings, and conclusions expressed in this publication are those of the authors and do not necessarily reflect the views of the Department of Information.

TABLE OF CONTENTS

Preface v

Chapter 1: INTRODUCTION 1

Chapter 2: THE SETTING OF THE STUDY 9

Chapter 3: DESCRIPTION OF THE SAMPLE AND RESEARCH METHODS 19

Chapter 4: USE OF MASS MEDIA BY THE SAMPLE 29

Chapter 5: VALUES AND FAMILY ASPIRATIONS 38

Chapter 6: ECONOMIC BEHAVIOR AND GOALS 56

Chapter 7: AGRICULTURE AND ADOPTION OF NEW FARMING PRACTICES 76

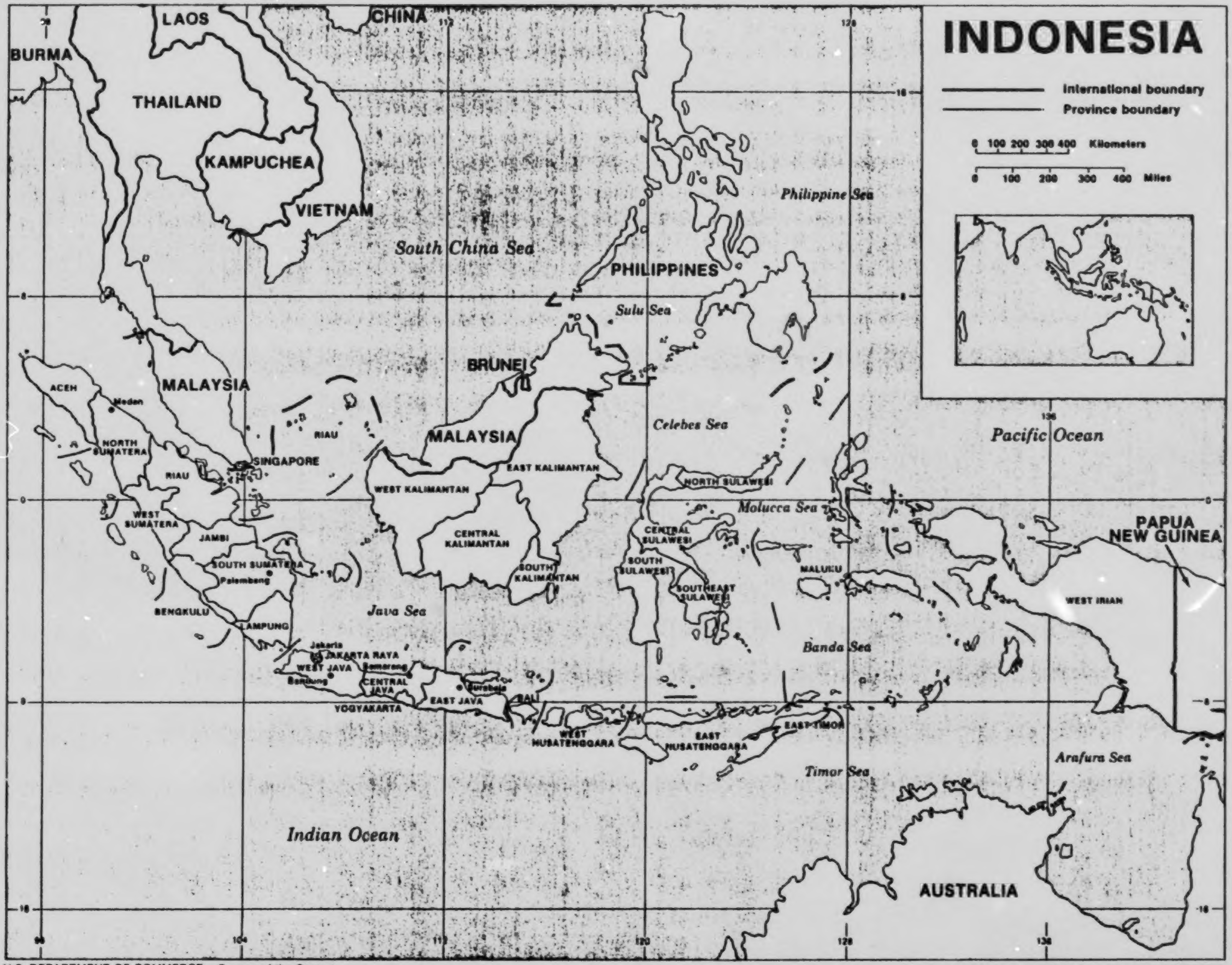
Chapter 8: HEALTH AND FAMILY PLANNING 87

Chapter 9: PARTICIPATION IN VILLAGE ORGANIZATIONS 104

Chapter 10: LANGUAGE AND COMMUNICATION BETWEEN ETHNIC GROUPS 114

Chapter 11: PRINCIPAL SOURCES OF DEVELOPMENT INFORMATION 124

Chapter 12: CONCLUSION 157


INDONESIA
International boundary
Province boundary
0 100 200 300 400 Kilometers
0 100 200 300 400 Miles
BURMA
LAOS
CHINA
THAILAND
KAMPUCHEA
VIETNAM
South China Sea
PHILIPPINES
Philippine Sea
Sulu Sea
BRUNEI
MALAYSIA
ACEH
Medan
NORTH SUMATERA
RIAU
SINGAPORE
MALAYSIA
WEST KALIMANTAN
EAST KALIMANTAN
CENTRAL KALIMANTAN
SOUTH KALIMANTAN
Celebes Sea
Pacific Ocean
NORTH SULAWESI
Molucca Sea
CENTRAL SULAWESI
SOUTH SULAWESI
SOUTHEAST SULAWESI
MALUKU
PAPUA NEW GUINEA
WEST IRIAN
WEST SUMATERA
JAMBI
SOUTH SUMATERA
Palembang
BENGKULU
LAMPUNG
Java Sea
Jakarta
JAKARTA RAYA
WEST JAVA
Bandung
Semarang
CENTRAL JAVA
YOGYAKARTA
EAST JAVA
Surabaja
BALI
WEST NUSATENGGARA
EAST NUSATENGGARA
EAST TIMOR
Banda Sea
Timor Sea
Arafura Sea
Indian Ocean
AUSTRALIA
96
104
112
120
128
136
16
8
0
8
16

U.S. DEPARTMENT OF COMMERCE Bureau of the Census

Names and boundary representation are not necessarily authoritative

PREFACE

This is an initial draft report on a large-scale benchmark survey undertaken in five provinces in Indonesia in 1976 before the formal introduction of television. Our research, which is a long-term cooperative project between LEKNAS/LIPI and the East-West Communication Institute of the East-West Center, funded largely by grants from the Indonesian Department of Information, explores a wide range of topics. This report covers only the major topics of our enquiry. Results from the more detailed statistical analysis are available on file at both LEKNAS/LIPI and the East-West Communication Institute.

It is difficult to acknowledge adequately all of those who have contributed to this research. The continuing support and advice of Mr. Sjamsoe Soegito, Head of the Research and Development Division of the Department of Information and his staff, and Dr. Astrid Susanto, of the Indonesian National Planning Board (BAPPENAS) have played a major role in this work, together with Professor Dr. Tb. Bachtiar Rifai, Chairman of the Indonesian Institute of Sciences (LIPI), Dr. Taufik Abdullah, former director and now research associate of LEKNAS/LIPI, and Dr. Suharso, Director of LEKNAS/LIPI.

We want to express our thanks to all of those who gave generously of their time to aid in the data collection. We want particularly to acknowledge the contributions made by Drs. F. Rachmadi, co-leader of the Indonesian research team, Drs. H. Asnawi Murani, secretary, and team members including Dr. Parsudi Suparlan, Dr. Maswadi Rauf, Drs. Paulus Tangdilintin, Drs. Rusdi Muchtar, Drs. Sugeng Soeprayanto, and Drs. Pintamalem Sinulingga. Darryl Chiu performed the laborious tasks of all the computerized data analysis. Louise Good provided editorial assistance. In her usually efficient way, Joyce Gruhn typed the entire report.

Finally a note of thanks to all the respondents interviewed in the five provinces. It was their enthusiastic cooperation which made this survey possible.

Alfian
S. Budhisantoso
Godwin C. Chu
Jack Lyle
Wilbur Schramm

January 1982

Honolulu, Hawaii

Chapter 1: INTRODUCTION

When Indonesia decided to launch its own telecommunications satellite, Palapa, in 1976, it took two significant steps. Ground relay stations for transmitting television programs to villages as a part of the national rural development program were constructed over the entire archipelago. At the same time, the Indonesian government through its Ministry of Information commissioned a five-year longitudinal study to assess the long-term social impact of television on rural Indonesia. This volume is the second of a series of technical reports on the findings of a cooperative research project jointly undertaken by the Indonesian National Institute of Economic and Social Research (LEKNAS/LIPI) and the East-West Communication Institute with funding support from the ministry.[1]

The role of mass media, particularly of television, in development has been the focus of research concern for more than twenty years. Ever since the publication of The Passing of Traditional Society, now a classic, by Daniel Lerner in 1958, the field has been enriched by a number of important theoretical treatises and correlational studies.[2] Wilbur Schramm, assessing the extent of knowledge in this field, has suggested that the media can be used to contribute to the feeling of nation-ness, to help teach the necessary skills for development, to help extend the effective market, and to help prepare people to play their new roles in the process of social and economic development.[3]

Evidence from correlational studies, however, has at least two limitations. First, we are not sure about the direction of causal relation, if indeed there is one. Take the relationship between the use of mass media and the adoption of agricultural innovations as an example. Is it because of the knowledge and information people acquire from the mass media that they are prompted to adopt the innovations? Or is it the other way around, that is, after people have decided to adopt innovations, they begin to seek knowledge and information from the media to support their decision? Even more seriously, one may well wonder whether a causal relation exists at all regardless of the direction. The relation between media usage and adoption of innovation may be spurious and due to a third factor. For example, it is quite possible that farmers who are better off have the financial means to try out the agricultural innovations, and they are also the ones who can afford a radio or a television set.

These are nagging questions that are usually discussed at length in methodology seminars. But in actual field research, we often have to bypass them because of various logistic constraints. One way to answer these unresolved questions is through a field experimental study, except that ideal opportunities rarely present themselves. One such attempt was made by Godwin Chu in 1963.[4] Before television had reached beyond the city of Taipei, he did a small pilot study in four adjacent villages in northern Taiwan. Farmers were interviewed in a benchmark survey before a television set was installed in one of their villages. After they had been watching television for six months, they were interviewed again for a before-and-after comparison. Although some interesting changes were observed, such as more knowledge about current events and agricultural innovations, the study had several limitations. The sample was small, and the time span was not long enough. Furthermore, due to limited

9

financial resources, no control group was used. Efforts have been made recently to correct these limitations in a larger study covering a period of fourteen years. By then, however, television had expanded at an enormous pace in rural Taiwan, and it was no longer possible to locate a control group.[5]

A second opportunity to study the developmental effect of television came in 1964 when the United States government introduced television in a massive way into its tiny Pacific territory of American Samoa.[6] The intent was, by use of modern technology, to speed the improvement of the long-neglected educational system, and through that to contribute to economic and social development. Perhaps no other school system in Asia or the Pacific has ever been presented so suddenly with such technological luxury. Although the total school enrollment in American Samoa was only about seven thousand, six open-circuit television channels, capable of reaching every school on every island except one, were installed. Expert television teachers were brought from the U.S. mainland to teach the core of the curriculum in front of the studio cameras, and Samoan teachers presided over the classroom parts of the lessons. In the first year of the project, the eight years of primary school were covered; in the second year, the television classes were extended through high school, grades 9 to 12.

Unfortunately, this experiment too was flawed because the idea of a control group was rejected; the schools insisted on "going forward together." Not all the schools were able to begin in the same year, however, and therefore it was possible to compare the progress of students who had been exposed to television for different lengths of time. As expected, those who had more experience with television learned more and faster. Increased proficiency in English, which was the first objective of the project, was especially marked. The only island too distant to receive the television was studied in the early 1970s, and not only were its average test grades far below those of the islands that had television, but the four students in that school who had spent even one or two years in a television school on one of the other islands were considerably ahead of their classmates. Before the new system could be given a truly fair trial, however, political and administrative troubles intervened, and television was discontinued entirely in the high schools and cut back in the primary schools. The lasting effect of the experiment in the schools seemed to be its contribution to the in-service training of teachers and to the willingness of the school system to use new methods and a variety of teaching aids, and beyond that, the enormous popularity of evening television in the Samoan homes on the islands.

The only other field experiment that was planned prior to the introduction of television was the Satellite Instructional Television Experiment (SITE) in rural India.[7] The research design used both an experimental group and a control group. The total sample size was initially 7,700. The respondents were interviewed before television was transmitted to Indian villages by the American satellite ATS-6, and twice afterwards during the course of one year. As in most surveys covering an extended period of time, the sample size had dropped on the third wave of interviews, to less than 6,500. The experimental group consisted of villages where rural inhabitants could watch the 2-1/2 hours of evening programs, including news; development programs on agricultural, health, and family planning; and entertainment. The control group consisted of villages that had no access to television.

On their knowledge of the development materials in the programs, no significant differences were found between television villages and control villages. There were, however, interesting differences by the amount of viewing. Those who viewed most, learned most. Between frequent viewers (four or more times a week) and nonviewers, the differences were mostly significant. Between occasional viewers and nonviewers, the differences were usually minimal. An encouraging finding was that SITE apparently helped to narrow the knowledge gap. Those who started with the least knowledge, gained most. Illiterates gained more than literates.

SITE was one of the most carefully designed experimental research projects to measure the impact of television on a rural audience. If there was any drawback, it was the duration of the experiment, which was cut short when the ATS-6 satellite was positioned elsewhere after it had served India for one year. Rural television in India was discontinued after that.

This left the Palapa satellite the only other feasible research opportunity. Palapa is owned by the Indonesian government. Thus an experiment of longer duration could be planned in advance. Palapa uses ground stations for relaying the television signals. Control villages could be located beyond the effective radius of the ground stations. This rare opportunity for research became a reality when the Indonesian government in 1976 allocated a sufficiently large grant for a comparative study of approximately 2,250 rural respondents before the introduction of television and five years afterwards.[8]

Once that decision was made, three basic questions remained to be resolved. The first had to do with the research design. Ideally we would want two sets of villages that are comparable in characteristics relevant to the impact of television. One set of villages were soon to receive television broadcasting. The other set of villages would not gain access to television during the five-year study. The former would be the experimental villages, and the latter the control villages. Before the introduction of television broadcasting, respondents in both experimental and control villages would be asked the same questions. Then five years later, these same respondents would be interviewed again, and asked the same questions. Essentially we have adopted this basic research design, as represented in Table 1.1.

Table 1.1

Research Design

	Experimental Villages	Control Villages
Pre-television survey	yes	yes
Viewing television	yes	no
Post-television survey	yes	yes

11

In our final analysis, we will compare the responses of the pre-television survey and the post-television survey for both the experimental villages and the control villages. If during the five-year period the social and economic fabric of Indonesia has been changing, this change should affect the two sets of villages in a similar way. This change over time should be reflected when we compare the results of the two surveys. If viewing television is having an additional effect on the villagers over and above the general impact of social and economic changes over time, then a comparison of the two surveys for the experimental villages will present a picture different from a comparison of the two surveys for the control villages. We shall perform a number of statistical tests in our final analysis to test whether or not viewing television has a significant impact.

The next question had to do with the setting of the study. Given the manpower and resource support that would be available to us, in what areas of Indonesia should we conduct our study? One choice seemed to be clear from the outset. If we were going to follow the research design just outlined, we would not be able to apply it to Java, where some 64 percent of the Indonesian population live. This was because by 1976 many areas in Java, including rural districts, already had access to television. The opportunity of conducting a pre-television survey had passed. Thus, the decision was to go outside Java. After extensive discussions and consultations with knowledgeable individuals, we decided to conduct our study in five provinces: Aceh in North Sumatra, Bali, West Kalimantan, North Sulawesi, and South Sulawesi. These provinces were chosen for a number of reasons. As we shall explain in Chapter 2, together these provinces embody the rich ethnic and cultural diversities of the Indonesian society. The Muslims, Hindus, Buddhists, Christians, and Confucians are all represented. All five provinces were to be served by ground relay stations following the launching of Palapa. Further, in each province cooperating institutions could be found for carrying out the fieldwork, and adequate transportation facilities exist between these provinces and Jakarta to make close supervision feasible. Another important reason was that these outlying provinces had rarely been surveyed before. Thus the information to be gained from the survey would have greater utilitarian value for the policymakers.

Finally, the question of subject matter arose. What effects shall we study? After considerable discussions, we phrased our research objective in two broad questions:

1. How does television contribute to the acquisition of knowledge and technology, new attitudes and behavioral orientations, and new aspirations and role expectations?

2. How does television contribute to the adoption of agricultural innovations, health and hygiene practices, and more active participation in community affairs?

These two questions, which are the foci of our experimental study, reflect Indonesia's current perspective on development.[9] Development in Indonesia in the first two decades after independence in 1945 was hampered by intense struggle for political power to the extent of neglecting the economic problems of production and distribution. By mid-1950s, President Sukarno emerged from the political crisis as the most dominant figure and initiated his Guided

Democracy. Obsessed by revolutionary ideas, Sukarno tried to build his policy on the basis of radical nationalism with a strong anti-Western fervor. In 1961, he formulated his ambitious Eight-Year Development Plan, which was discarded as unrealistic when his power was terminated following the Communist-inspired abortive coup of 1965.

The present New Order Government under President Suharto, who inherited from Sukarno a country in disarray, has been pursuing a more pragmatic policy. Suharto gives high priority to rural development. Without seeking radical changes in the social and economic fabric of rural Indonesia, he has been implementing a two-pronged policy. On the one hand, the government has spent considerable efforts to develop the infrastructure by constructing new roads and irrigation systems for the rural areas. Simultaneously, the government has initiated a massive new program of rice growing, known as BIMAS, by encouraging the farmers to use new high-yield seeds, chemical fertilizers, and pesticides. To support the programs of rural development, the Indonesian government needs effective communication channels to inform the peasants of the new opportunities, supply them with technical information, and enlist their participation and support. These are the crucial roles assigned to mass media, particularly since television is now made available through the Palapa satellite. In addition to the development support function, there has been the general expectation, founded largely on social science research conducted in the West, that television can be used to popularize pragmatic values that are conducive to production.

Within this overall perspective, the two basic research questions of the experimental study were further broken down into a number of more specific questions:

- How does television contribute to the acquisition of knowledge and information about the various development programs?
- How does television contribute to the acquisition of knowledge about agricultural technology and to the adoption of new farming practices?
- How does television contribute to the acquisition of knowledge about health and hygiene and to the practice of family planning?
- How does television contribute to the acquisition of economic information and more productive economic behavior?
- How does television contribute to more active participation in community life?
- How does television contribute to more integrative relations among the various ethnic groups, a major concern in the pluralistic Indonesian society?
- How does television contribute to higher educational and occupational aspirations and the inculcation of pragmatic values?

Using these questions as our guide, we undertook a pre-television benchmark survey in the five provinces in the winter of 1976. Soon afterward, television transmission by satellite to rural Indonesia began. We plan to go back to the same villages in the spring of 1982 for our post-television survey, after the experimental villages have had television for five years, and will compare the results of this new survey with the results of the benchmark survey.

While answers to our research questions will have to wait till the completion of the comparative analysis sometime in late 1982, the data from the initial benchmark survey undertaken in 1976 can throw some light on the ability of mass media to contribute to development. Although television had yet to be formally introduced to these villages in 1976,[10] many of the residents in both the experimental and control villages had been exposed to radio, newspapers, and to a lesser extent, magazines for some years. If television as a mass medium can contribute to development in the way our research questions have implied, then we would expect the other media—radio, newspapers, and magazines—to have some impact as well. While it is no longer feasible to assess that impact experimentally, we can at least use our data to ascertain (1) whether radio listening, newspaper reading, and magazine reading are positively related to certain indices of development, such as acquisition of agricultural technology and adoption of innovative farming practices, and (2) whether the positive relationships, if found, are real or spurious. If positive relationships do exist and if they are not spurious, such findings will give us some evidence about the impact of mass media on development.

This volume of technical reports, based on findings from the entire sample as a whole, has been prepared for this purpose. In Chapter 2, we shall describe in full detail the setting of the study to provide the necessary background information for understanding the findings. Chapter 3 will discuss how we drew our sample, describe its characteristics, and explain our methods of analysis. Chapter 4 is devoted to an in-depth analysis of the use of mass media by the respondents in our sample. With these chapters for background, we will then proceed to analyze the relationships between mass media usage on the one hand, and values and aspirations, economic behavior, knowledge of agricultural technology and adoption of innovative farming practices, knowledge and practice of family planning, adoption of new health practices, participation in community life, ethnic relations, and knowledge about development programs on the other hand. In the concluding chapter, we shall summarize what we have learned from the benchmark survey itself and assess what impact may be expected from the coming of television.

NOTES

1. The idea for this research was first discussed between Professor Bachtiar Rifai, Chairman of the Indonesian Institute of Sciences (LIPI), and Dr. Godwin Chu of the East-West Center in July 1975. Upon Professor Rifai's suggestion, Dr. Taufik Abdullah, then Director of LEKNAS/LIPI, visited the East-West Center in August 1975 to continue the discussion. The idea of a long-term cooperative research project by EWC and LEKNAS to study the social effects of satellite-transmitted television in Indonesia was endorsed by both Dr. Abdullah and Dr. Wilbur Schramm, then Director of East-West Communication Institute (EWCI). Following consultations with Dr. Abdullah, a research proposal was submitted to the Indonesian Ministry of Information. Dr. Abdullah appointed Dr. Alfian, a political scientist, as the team leader of the LEKNAS researchers to develop the cooperative project. Dr. Chu was named the EWCI project leader by Dr. Jack Lyle, who succeeded Dr. Schramm as Director of EWCI. In April 1976, Dr. Alfian came to Honolulu for consultation. A planning meeting was held, attended by, among others, Dr. Astrid Susanto of the Indonesian National Planning Board, E. Lloyd Sommerlad of Unesco, Professor Alice Dewey of the Anthropology Department at the University of Hawaii, and Dr. Daniel Lerner. The research plans were further refined by Dr. Alfian, Dr. S. Budhisantoso (an anthropologist and co-leader of the LEKNAS research team), and their colleagues, and reviewed by Mr. Sjamsoe Soegito, head of the Research and Development Division of the Indonesian Ministry of Information. During Dr. Chu's visit to Jakarta in August 1976, the sampling procedures were worked out, and the survey questionnaire was revised. Dr. Peter Weldon, a sociologist on the staff of the Ford Foundation in Jakarta, made valuable contributions. The pre-television benchmark survey was undertaken in November and December of 1976 upon approval of funds by the Indonesian Ministry of Information totaling about US$68,000. LEKNAS/LIPI made an in-kind contribution of research staff time estimated at US$77,500. The East-West Center made a cash contribution of US$12,000 to the first-year fieldwork costs. The cooperative research has continued to receive the support of Dr. Suharso, who has succeeded Dr. Abdullah as the Director of LEKNAS/LIPI. Dr. Alfian, now Director of the Indonesian National Institute of Cultural Studies (LRKN/LIPI), will continue his role as the leader of the Indonesian researchers until the conclusion of this cooperative research. Both Dr. Lyle and Dr. Schramm have played active roles in this project. The first research monograph on this cooperative research has been published. See Alfian and Godwin C. Chu, eds., *Satellite Television in Indonesia* (Honolulu: East-West Communication Institute, and Jakarta: LEKNAS/LIPI, 1981).

2. See Daniel Lerner, *The Passing of Traditional Society* (Glencoe, Illinois: The Free Press of Glencoe, 1958). Also see Ithiel de Sola Pool, "The Role of Communication in the Process of Modernization and Technological Change," in *Industrialization and Society*, eds. Bert F. Hoselitz and W. E. Moore (Paris: Unesco, 1963); Lucian W. Pye, ed., *Communications and Political Development* (New Haven: Yale University Press, 1963); Wilbur Schramm, *Mass Media and National Development* (Stanford: Stanford University Press, 1964); Daniel Lerner and Wilbur Schramm, eds.,

Communication and Change in the Developing Countries (Honolulu: The University Press of Hawaii, 1967); Everett M. Rogers, Modernization Among Peasants: The Impact of Communication (New York: Holt, Rinehart and Winston, 1969); Alex Inkeles and David H. Smith, Becoming Modern: Individual Change in Six Developing Countries (Cambridge: Harvard University Press, 1974); Daniel Lerner and Wilbur Schramm, eds., Communication and Change: The Past Ten Years--and the Next (Honolulu: The University Press of Hawaii, 1976).

3. See Wilbur Schramm, "Communication Development and the Development Process," in Pye, Communications and Political Development, pp. 30-57.

4. Godwin C. Chu, "When Television Comes to a Traditional Village" (Paper presented at annual conference of American Association for Public Opinion Research, Pacific Chapter, Los Angeles, January 1966).

5. The details of this longitudinal research are presented in Godwin C. Chu and Ginyao Chi, "Shen Keng Revisited: Mass Media and Cultural Change in Northern Taiwan," unpublished manuscript, 1981.

6. Wilbur Schramm, Lyle M. Nelson, and Mere T. Betham, Bold Experiment: The Story of Educational Television in American Samoa (Stanford: Stanford University Press, 1981).

7. For more details about SITE, see Unesco, "Planning for Satellite Broadcasting: The Indian Instructional Television Experiment," Report no. 78, (Paris, 1976). Also see Bella Mody, "Lessons from the Indian Satellite Experiment," Educational Broadcasting International, 11(1978):117-20. For a comprehensive report on the research findings and implications, see Binod C. Agrawal, SITE Social Evaluation: Results, Experiences and Implications (Ahmedabad, India: Space Applications Centre, 1980).

8. For an interim technical report on the initial findings, see Alfian, Godwin C. Chu, and others, "Rural Indonesia Before Television: A Benchmark Survey," Jakarta: LEKNAS/LIPI, and Honolulu: East-West Communication Institute, 1978.

9. For a fuller discussion of Indonesia's experiment in development, see Alfian, Godwin C. Chu, and Taufik Abdullah, "Communication and Development: An Indonesian Experiment" in Alfian and Chu, eds., Satellite Television in Indonesia, pp. 1-20.

10. A few enterprising villagers had already bought television sets and were able to receive fairly clear signals from the ground stations that were already completed.

Chapter 2: THE SETTING OF THE STUDY

Indonesia is the largest archipelago in the world with a total area of 1,919,443 square kilometers. It consists of 13,667 islands stretching across some 5,110 kilometers from east to west and 1,188 kilometers from north to south. As many as 992 of these islands are inhabited.

The preliminary results of the 1980 census show that Indonesia now has a population of over 147 million, making it the most populous country in Southeast Asia. About two-thirds of this population live on the relatively small island of Java, which constitutes less than 7 percent of the country's total land area.

In many ways Indonesia is a pluralistic society. It has people of diverse ethnic, cultural, and religious backgrounds. As Table 2.1 shows, 87.5 percent of the people are Muslims.

Table 2.1

Population of Indonesia by Religion

Religion	%
Islam	87.5
Catholic	2.3
Protestant	4.4
Other Christian	0.8
Hinduism	1.9
Buddhism	0.9
Confucianism	0.8
Others	1.4
Total	100.0

Source: N. Iskandar, Sketsa Penduduk Indonesia (Jakarta, Lembaga Demografi Fakultas Ekonomi, Universitas Indonesia, 1976), p. 10.

Even though the majority of the people are Muslims, in several provinces such as East Nusatenggara, North Sulawesi, and Maluku, the Christians are dominant. Most of the Hindus live in Bali. In some of the provinces, such as West Kalimantan and Irian Jaya, we find a substantial number of people who believe in their own ancestral native religions. Confucianism is the religion of the Chinese. But a large number of the Chinese, especially the secular/Western educated, are Christians (Catholics or Protestants), while some of them are either Buddhists, Hindus, or Muslims.

Among the various ethnic groups, there are those who take their religions very seriously. The Acehnese, the Minangkabaus, the Mandailings, the Banjarese, the Sundanese, the Madurese, and the Buginese are some of the ethnic groups in which the most members strongly adhere to their Islamic faith. The same thing can be said about the Balinese who are Hindus, and the Bataks, the Ambonese, the Timorese, the Torajans, and the Minahasans who are Christians.

The Javanese are the dominant ethnic group, and the majority of them are Muslims. A large number of the members of this ethnic group, however, do not take their Islamic religion seriously. They do not feel obliged to follow the teachings of their faith consistently and to practice religious prayers regularly. These nominal Muslims have been characterized as abangans. In contrast to them, the practicing Javanese Muslims have been given the label of santris. Religious values play a dominant role in the attitude and behavior of these santris. On the other hand, the abangans are deeply influenced by their own traditional values, much more so than Islamic values.

Since proclaiming its independence in 1945, Indonesia has made very significant progress in the field of education, notably in eradicating illiteracy. It was estimated that in 1930, 93.6 percent of the people were illiterate. The 1971 census shows that 41 years later the figure was down to 39.1 percent. The same census also shows that the proportion of illiteracy in the rural areas (43.0%) was larger than in the urban areas (20.9%). By sex, 49.7 percent of females were illiterate compared to 27.9 percent of males. By province, North Sulawesi was the lowest with 12.6 percent and South Kalimantan was the highest with 61.9 percent (Iskandar, 1976, p. 10-11).

Another interesting aspect is that the Christians have been better educated than the other religious groups. The 1971 census again shows that nationwide, of those age ten or above, 40.4 percent never went to school. For Protestants, this figure was 20.0 percent; for Confucians, 28.1 percent; for Catholics, 28.4 percent; for Muslims, 41.5 percent; and for Hindus, 55.3 percent. The highest illiteracy rate, 61.5 percent, was found among those who believe in their own ancestral/native religions (Iskandar, 1976, p. 13).

Administratively speaking, Indonesia is divided into 27 provinces, including East Timor. Five of these provinces are located on Java, 8 on Sumatra, 4 on Kalimantan, and 10 on the eastern islands. Below the province, which is also known as the first level region, we find the second level region, which can be a regency/district or a municipality. There are 246 regencies and 54 municipalities all over the archipelago. These 300 regencies and municipalities are further divided into 3,349 subdistricts (kecamatans) (Biro Pusat Statistik, 1980, p. 22). Finally, at the bottom level, we find more than 60,000 villages.

The Javanese play a dominant role in Indonesia. Yet, as stated in Chapter 1, none of the provinces on the island of Java was included in the pre-television survey conducted in November and December 1976 because Java had been widely penetrated by television by that time. Therefore, it was decided to select five provinces outside Java, namely, Aceh in the northern tip of Sumatra, Bali, West Kalimantan, South Sulawesi, and North Sulawesi. These five provinces have a number of interesting characteristics which in turn reflect the pluralistic nature of Indonesian society.

As can be seen in Table 2.2, four of the five provinces each have less than 2 percent of the total Indonesian people. The share of the other province, South Sulawesi, is 4.4 percent.

Table 2.2

Population and Area of Five Provinces
(Percentage of Indonesian Total)

Province	Population (%)[1]	Area (%)[2]
Aceh	1.7	2.9
Bali	1.8	0.3
West Kalimantan	1.7	7.7
South Sulawesi	4.4	3.8
North Sulawesi	1.5	1.0
Java	64.0	6.9

Sources: [1] 1971 Census.

[2] Biro Pusat Statistik, Buku Saku Statistik Indonesia 1978/1979 (Jakarta: BPS, 1980).

Among the five provinces, Bali has the smallest land area (0.3% of total Indonesia), and that makes it one of the most densely populated islands. The largest land area belongs to West Kalimantan (7.7% of total Indonesia), which is larger than the island of Java (6.9%).

Table 2.3 shows percentages of the population by religion. Islam is very dominant in Aceh (97.0%) and South Sulawesi (88.8%). The 3 percent non-Muslims in Aceh are likely members of non-Acehnese ethnic groups. Most of the 2.2 percent of the population who are Christians (Catholics and Protestants) are the Bataks, who migrated from the province of North Sumatra. Among the various ethnic groups in South Sulawesi, the Torajans have become the stronghold of Christianity, notably Protestant. Christianity is also strong among the Ambonese, the Minahasans, the Timorese, and the Chinese who migrated to this province.

19

Almost all Balinese are Hindus. Those who belong to other religions are usually non-Balinese who migrated to the island and most of them live in the urban centers or coastal areas. Most of the Muslims in Bali (5.1%) are Madurese and Javanese. In North Sulawesi, the Christians (largely Protestants) are in the majority (total, 55.8%), but the Muslims are also significantly strong (43.3%). Some ethnic groups, like the Minahasans and the Menadonese, are overwhelmingly Christians, while others, such as the Gorontalos, are mostly Muslims.

Even though Islam has the largest followers (42.7%) in West Kalimantan, it is not the religion of the majority. The followers of Islam are largely Malays (Melayu) who occupy the coastal areas. In the hinterlands live the Dayaks, the majority of whom still believe in their ancestral/native religions, as can be seen from the 32.4 percent listed as "others" in Table 2.3. This province also indicates the success of the Christian missionaries, especially the Catholics (13.7%), in spreading their faiths among the Dayaks. The Chinese share a significant proportion of the total population as can be seen from the 6.6 percent listed as Confucians. In addition to that, a substantial number of Chinese are Christians. As in other provinces, a large number of Buddhists are also Chinese.

As shown in Table 2.4, the rates of illiteracy (among those at the age of ten and over) are very high in three of the five provinces, West Kalimantan (52.5%), Bali (52.4%), and South Sulawesi (48.9%). These figures are far above the national figure of 39.1 percent. North Sulawesi has the lowest rate in the country with 12.6 percent.

By locality, there are marked differences between those who live in the urban areas and those in the rural villages, except in North Sulawesi. As the figures show, in the rural villages of the other four provinces, illiteracy is still a serious problem.

Comparing those who are illiterate by sex, the figures show that the rates for females are far higher than those for males, again except in North Sulawesi where there is no significant difference considering the fact that the figures are low.

Table 2.5 shows educational attainments of the people in the five provinces, at the age of ten and over in 1971. Again, North Sulawesi emerges with the best records. The figures show that only 14.8 percent of its people under the same category never went to school in that province, compared to 33.7 percent in Aceh, 50.2 percent in South Sulawesi, 53.9 percent in Bali, and 55.8 percent in West Kalimantan. Proportionally, North Sulawesi has the highest figures in educational attainments beginning with those who did not finish elementary school up to those who had the chance to attend the academy or university. For example, the figures for the academy/university level show that the percentage for North Sulawesi is 5 times higher than that of West Kalimantan and 2-1/2 times higher than each of the other three provinces.

The spread of Christianity since the Dutch colonial period has been a major factor in the apparent success of North Sulawesi in developing its educational system. Relatively better economic conditions are another factor.

Table 2.3

Population of Five Provinces by Religion
(Percentage of Indonesian Total)

Religion	Aceh[1]	Bali[2]	West Kalimantan[3]	South Sulawesi[4]	North Sulawesi[5]
Islam	97.0	5.1	42.7	88.8	43.3
Catholic	0.3	0.4	13.7	1.0	2.5
Protestant and Other Christian	1.9	0.5	4.2	6.9	53.3
Hinduism	0.1	93.3	0.2	0.2	0.4
Buddhism	0.6	0.7	0.2	0.3	0.4
Confucianism	0.1	-	6.6	0.5	-
Others	-	-	32.4	2.3	0.1

Sources: [1] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Aceh, Seri E, No.1, Jakarta, BPS, Maret 1974, p. 47.

[2] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Bali, Seri E, No.14, Jakarta, BPS, Maret 1974, p. 47.

[3] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Kalimantan Barat, Seri E, No.17, Jakarta, BPS, Maret 1974, p. 47.

[4] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Sulawesi Selatan, Seri E, No.23, Jakarta, BPS, Maret 1974, p. 47.

[5] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Sulawesi Utara, Seri E, No.21, Jakarta, BPS, Maret 1974, p. 47.

Table 2.4

Illiteracy Rate in Five Provinces by Sex and Locality (Percentage of Population 10 Years of Age and Over)

Sex	Locality	Aceh[1]	Bali[2]	West Kalimantan[3]	South Sulawesi[4]	North Sulawesi[5]
Male	Urban	6.5	15.4	20.5	20.2	6.5
	Rural	22.1	40.9	42.1	46.0	11.3
	Urban & Rural	20.6	38.3	39.7	41.0	10.3
Female	Urban	20.5	37.2	42.2	36.5	10.3
	Rural	45.1	69.1	68.7	60.2	15.9
	Urban & Rural	43.1	65.9	65.7	55.9	14.8
Male and Female	Urban	13.1	26.5	31.2	28.6	8.4
	Rural	33.8	55.3	55.1	53.5	13.7
	Urban & Rural	32.0	52.4	52.5	48.9	12.6

Sources: [1] Biro Pusat Statistik, *Sensus Penduduk 1971, Penduduk Aceh*, pp. 51-59.

[2] Biro Pusat Statistik, *Sensus Penduduk 1971, Penduduk Bali*, pp. 51-59.

[3] Biro Pusat Statistik, *Sensus Penduduk 1971, Penduduk Kalimantan Barat*, pp. 51-59.

[4] Biro Pusat Statistik, *Sensus Penduduk 1971, Penduduk Sulawesi Selatan*, pp. 51-59.

[5] Biro Pusat Statistik, *Sensus Penduduk 1971, Penduduk Sulawesi Utara*, pp. 51-59.

Table 2.5

Percentage of Population 10 Years of Age and Over by Educational Attainment (1971)

Level of Education	Aceh[1]	Bali[2]	West Kalimantan[3]	South Sulawesi[4]	North Sulawesi[5]
No education	33.7	53.9	55.8	50.2	14.8
Some primary school	32.6	25.7	27.8	24.3	45.3
Primary school	26.7	15.7	13.7	17.8	27.9
Junior high	4.9	3.0	1.8	4.9	8.1
Senior high	1.9	1.5	0.7	2.6	3.4
Academy/university	0.2	0.2	0.1	0.2	0.5

Sources: [1] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Aceh, p. 69.

[2] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Bali, p. 69.

[3] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk, Kalimantan Barat, p. 69.

[4] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Sulawesi Selatan, p. 69.

[5] Biro Pusat Statistik, Sensus Penduduk 1971, Penduduk Sulawesi Utara, p. 69.

It is difficult to find reliable data on media distribution in the five provinces. For the last several years a few national newspapers and magazines, published in Jakarta, have been able to seriously penetrate the various provincial capitals, especially due to the rapid improvement in the daily flights to and from Jakarta. In addition to the national newspapers there have always been one or more local newspapers in each of the provinces. South Sulawesi and Bali are two of the few provinces that have very strong local newspapers. However, the proportion of the people subscribing to the national newspapers is probably much higher in North Sulawesi than in the other four provinces. This assumption is based largely on their relatively better educational and economic achievements.

Table 2.6 shows us the number of registered television sets in the five provinces for the years of 1976, 1977, and 1978. Several years before the launching of the Palapa Satellite in 1976, a television studio was established in Ujung Pandang, the provincial capital of South Sulawesi. This explains why that province has a very large number (9,725) of registered television sets in 1976.

Table 2.6

Number of Registered Television Sets in Five Provinces, 1976-1978, Compared with Percentage of Population

Province	% of Total Indonesian Population[1]	Number of Registered Television Sets[2]		
		1976	1977	1978
Aceh	1.7	948	3,931	6,872
Bali	1.8	-	6,895	11,803
West Kalimantan	1.7	1,377	6,638	11,166
South Sulawesi	4.4	9,725	16,319	22,997
North Sulawesi	1.5	-	5,385	13,733
Indonesia	100.0	600,033	863,227	1,156,747

Sources: [1] Based on 1971 census.

[2] Biro Pusat Statistik, Buku Saku Statistik Indonesia 1978/1979 (Jakarta, BPS, 1980), p. 405.

However, the 1978 figures show that in proportion to the size of its population (1.5 percent of Indonesia's total television) North Sulawesi has, with 13,733 television sets, the highest rate of television set ownership. The same can also be said about West Kalimantan, which has 11,166 registered television sets. Even though the figure for Bali is also high (11,803), one should remember that the island is the most important tourist area in Indonesia. A substantial part of that figure is likely located in the 4,560 hotel and lodging rooms. South Sulawesi had only 1,945 hotel and lodging rooms in the same year (1978), followed by Aceh (923), West Kalimantan (543), and North Sulawesi (404) (Biro Pusat Statistik, 1980, pp. 420-21). We have no reliable data for radio set ownership.

As Table 2.7 shows, South Sulawesi had the highest figure for licenses issued for telephones in 1978. Since its population is three times higher than North Sulawesi that figure is proportionally lower than the figure for North Sulawesi (5,327). With 8,725 telephone set receivers, Bali had the highest proportion of telephones to population, which is 1.8 percent of total Indonesia. But again, we must remember that Bali is the most important tourist area.

Table 2.7

Number of Licenses Issued for Telephones in Five Provinces in 1978

Province	N
Aceh	4,289
Bali	8,752
West Kalimantan	2,534
South Sulawesi	12,984
North Sulawesi	5,327
Indonesia	447,034

Source: Biro Pusat Statistik, Buku Saku, p. 407.

In Aceh and South Sulawesi the benchmark (pre-television) survey was carried out in the villages where almost all of the people were Muslims, while in the selected villages of Bali they were overwhelmingly Hindu. Even though Islam is quite strong in North Sulawesi, the survey was conducted in the Protestant Christian villages of Minahasa. It was in West Kalimantan where the respondents were significantly divided into several religious backgrounds—Muslims, Confucians who were Chinese, Christians (predominantly Catholics), and Hindus.

REFERENCES

Biro Pusat Statistik. Buku Saku Statistik Indonesia 1978/1979. Jakarta: BPS, 1980.

_______. Sensus Penduduk 1971, Penduduk Aceh, Seri E, No. 1. Jakarta: BPS, Maret 1974.

_______. Sensus Penduduk 1971, Penduduk Bali, Seri E, No. 14. Jakarta: BPS, Maret 1974.

_______. Sensus Penduduk 1971, Penduduk Kalimantan Barat, Seri E, No. 17. Jakarta: BPS, Maret 1974.

_______. Sensus Penduduk 1971, Penduduk Sulawesi Utara, Seri E, No. 21. Jakarta: BPS, Maret 1974.

_______. Sensus Penduduk 1971, Penduduk Sulawesi Selatan, Seri E, No. 23. Jakarta: BPS, Maret 1974.

Iskandar, N. Sketsa Penduduk Indonesia. Jakarta: Lembaga Demografi Fakultas Ekonomi Universitas Indonesia, 1976.

Chapter 3: DESCRIPTION OF THE SAMPLE AND RESEARCH METHODS

The sample for the benchmark survey consisted of 2,248 respondents drawn from villages in five provinces to represent a broad cross-section of the sociocultural diversity of Indonesia. Given the total sample size, each province was allocated a subsample of 450 respondents. At this point we faced a practical decision. Should we divide the subsample equally between the television villages and the non-television villages? Or should we assign more respondents to the former than the latter?

We decided to assign more respondents to the television villages than the non-television villages at a ratio of 2 to 1. This decision was based largely on statistical considerations. We expected that change would take place in the television villages, and a larger sample size would make it more likely to detect the change. On the other hand, our hypothesis was that no or little change would take place in the non-television villages. Therefore we could afford to have a smaller sample size there. Our fixed amount of resources would be more effectively used this way. The specific sizes of the subsamples from the five provinces are shown in Table 3.1.

Table 3.1

Television and Non-Television Samples

	TV Villages	Non-TV Villages
Aceh	300	148
Bali	300	150
West Kalimantan	300	150
South Sulawesi	300	150
North Sulawesi	300	150

The Indonesian satellite uses ground relay stations for transmitting television signals. Each relay station was designed to have a radius of 80 kilometers (approximately 50 miles). The television villages were all chosen from within the radius of the ground stations. The non-television villages, which served as controls, were chosen from outside the radius inasmuch as they were similar to the television villages in four characteristics: (1) ethnic composition; (2) religious backgrounds; (3) community occupational structure; and (4) geographical terrain.

For each village included in the sample, all the neighborhood blocks were identified and listed. A two-stage sampling procedure was used. First, a number of neighborhood blocks were randomly chosen. From each neighborhood block included in the sample, a list of households was obtained either from the neighborhood block office or by an on-the-spot survey. A number of households were chosen at random from each designated block. The sample ratios varied from village to village in order to achieve the total subsample size of 300 for the television villages and 150 for the non-television control villages in each province.

The interviewers were recruited locally from among college students, high school teachers, and local block workers. All interviewers were briefed on the objective of this survey, and given training in interview techniques. Each interviewer was required to conduct at least one test interview to make sure that he or she understood all the questions and the various options contained in the survey instrument.

Before an interviewer went to a village, a village official was asked to announce the purpose of the survey. For the television villages, it was explained that television broadcasting would soon be brought to their villages, and that station personnel would like to learn more about the rural audience and find out what they like. For the non-television control villages, the same explanation was given except that television broadcasting would be introduced to their general area, but not to their villages directly.

The interviewers were instructed to visit only the designated households and not to make any substitutions. The interviewer was allowed to interview anyone, either male or female, 15 years old or above, in a designated household. During the planning stage, the researchers considered making a complete list of all the residents 15 years old and above and then randomly drawing respondents from this list. If a respondent was not at home, the interviewer would be required to call back until the respondent was interviewed. This original plan was dropped partly because of the cost of making the list and the expenses of interview call-backs. There was also a concern that the villagers might not understand why the interviewer must come back again and again in order to locate and interview one particular person in the household. This could have caused misunderstanding.

The field survey received the full cooperation of the Indonesian government authorities at the central, provincial, and local levels, as well as the support of local universities. Reception by the peasants was enthusiastic. All respondents were eager to cooperate. In fact, when the word got around that students and schoolteachers were coming to talk to people in the villages about television, some local residents volunteered to be interviewed. They were disappointed when they learned that only certain families had been selected. They could not understand the rationale of random sampling. On the average, each interview lasted about 1-1/2 hours.

Sample Composition

Of the total sample, 79.4 percent were males and 20.6 percent were females. Age distribution was more even: 19.1 percent below 30; 31.7 percent from 30 to 39; 23.1 percent from 40 to 49; and 26.1 percent above 50.

Most respondents in our sample (84.8%) were married and living with their spouses. Of the remaining respondents, 7.6 percent were widows or widowers, 7.4 percent were single, and 0.2 percent were married but not living together.

In terms of primary occupation, the majority of them, 64.5 percent, were farmers. The next largest group of respondents, 14.7 percent, were in civil or military services, followed by traders (11.7%), workers and craftsmen (6.9%), and those with no regular jobs (2.1%).

We further asked all respondents, regardless of their primary occupation, whether they were involved in some form of agricultural employment. Nearly half of the respondents (46%) worked on their own family farms, and another 9.4 percent were tenant farmers. Sharecroppers made up a total of 13.4 percent, while farm laborers and migrant farmers constituted 2.3 percent and 1.7 percent respectively. Only 5.3 percent of the respondents were landlords who did not perform agricultural work themselves. The remaining 21.9 percent were not involved in agricultural employment.

An overwhelming majority of the respondents had some education: 34.5 percent had attended primary school; 23.1 percent were primary school graduates; 11.4 percent had attended junior high school; and 9.7 percent had gone to high school or college. Those who had no schooling constituted 21.2 percent.

We measured the economic status of the respondents by asking the interviewers to observe whether a family had any of the following items: guest chair, buffet, wall clock, wristwatch, radio, television set, mattress, bicycle, motorcycle, sewing machine, kerosene stove, and cigarette lighter. Table 3.2 shows the percentages of respondents who had these items in their homes and the estimated market prices in rupiahs (Rp).

On the basis of the kinds of items a family had and the estimated prices, each family was given a personal property value. For example, if a family had a guest chair, a buffet, and a kerosene stove, it was given a property value of Rp22,000. The range for the entire sample was from Rp0 to Rp512,000. The full range was then divided into five approximately equal subgroups. The lowest group, 20.4 percent, had property values below Rp10,500. This group was classified as the lower economic status group. The next group, 19.6 percent, had property values from Rp12,000 to Rp30,000. This group was classified as the lower middle economic status group. Those having property values from Rp30,500 to Rp55,500 (20%) were classified as the middle economic status group. Another 21.3 percent, with property values from Rp57,000 to Rp95,500, constituted the upper middle economic status group. The upper economic status group, the top 18.7 percent, had property values from Rp97,000 up to Rp512,000. In statistical terms the distribution of personal properties was highly skewed in a positive direction (see Figure 3.1).

We divided the respondents into five economic status subgroups of approximately equal size primarily for the purpose of further statistical analysis. The meaning of a subgroup was defined entirely by the range of personal property values. Our statistical classification should not be interpreted to mean that the rural population in the provinces where we did our survey can be evenly divided into five economic strata.

Table 3.2

Respondents Who Owned Property Items and Estimated Market Prices

Property Items	Ownership (%)	Estimated Prices*
Guest chair	65.5	Rp 5,000
Buffet	58.1	7,000
Wall clock	18.3	10,000
Wristwatch	45.6	5,000
Radio	43.5	5,000
Television set	1.6	100,000
Mattress	81.4	2,500
Bicycle	49.7	25,000
Motorcycle	9.4	300,000
Sewing machine	35.8	40,000
Kerosene stove	35.3	10,000
Cigarette lighter	20.2	2,500

*These were estimated prices in rural areas in 1976. Prices of furniture such as the guest chair were based on simple furniture generally used in rural areas.

As for religious affiliations, 51.5 percent were Muslims; 20.5 percent, Hindus including a few Buddhists; 20.3 percent, Christians (Roman Catholics and Protestants); and 7.7 percent, Confucians. Because we are not going to make a separate analysis for each province, but will use religious affiliations as a factor for differentiating the various groups, we shall examine their characteristics.

In terms of geographical areas, all the respondents in Aceh and all but one of the respondents in South Sulawesi were Muslims. That one respondent was a Christian. In Bali, all respondents except one (a Confucian) were Hindus and Buddhists. In North Sulawesi, nearly 99 percent of the respondents were Christians. The remaining 1 percent included one Muslim and five Hindus. In West Kalimantan, which is generally considered Indonesia's melting pot, the

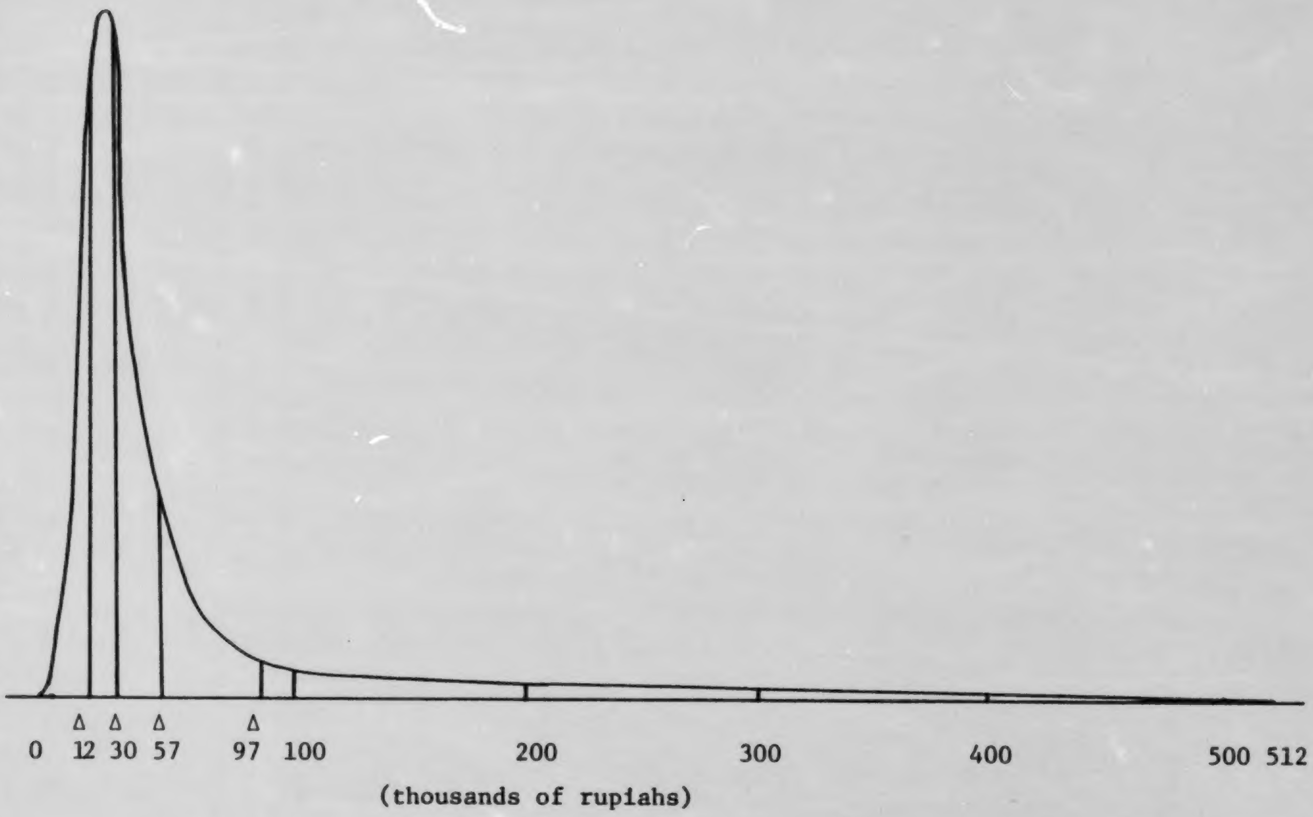


Figure 3.1. Distribution of Personal Properties in Rupiah

sample included 57.8 percent Muslims, 38.5 percent Confucians who were Chinese, and the remaining 3.7 percent were Christians and Hindus.

The different religious groups had varying levels of education. By and large, the Christians had the highest level education, followed by the Hindus and Buddhists, the Muslims, and the Confucians. The percentages of those who had no formal education were 1.5 percent for Christians, 19.9 percent for Hindus and Buddhists, 26.6 percent for Muslims, and 42.1 percent for Confucians. Conversely, the percentages of those who had attended at least junior high school were 34.1 percent for Christians, 21.6 percent for Muslims, 13.7 percent for Hindus and Buddhists, and 2.9 percent for Confucians. See Figure 3.2.

While the educational level of the Confucians was low they were clearly in the upper economic status group. If we combine the upper and upper middle economic status groups, 88.9 percent of the Confucians were in that category. The corresponding percentages for the other religious groups were 42.3 percent for Christians, 39.5 percent for Muslims, and 20.8 percent for Hindus and Buddhists. See Figure 3.3.

There were occupational differences, too. Among Hindus and Buddhists, 83.8 percent were farmers. The rest were spread evenly among workers, traders, and civil and military services. The percentage of farmers was also high among the Christians (70.5%). The next largest occupation among the Christians was civil and military services (13.9%). Muslims had the highest percentage in civil and military services (20.4%), although the majority of them were farmers (60.5%). The one predominant occupation among the Confucians was trade. Nearly half of them, 46.8 percent, were traders, followed by farmers (25.1%) and workers (24%). Only 1.8 percent of the Confucians were in civil and military services. See Figure 3.4.

Our survey provided additional information on the living conditions of the respondents in the sample. Nearly half of the respondents (49%) had bathing and toilet facilities in their homes. Approximately the same percentage of homes (47.1%) had trash and waste disposal facilities. Most of the houses (62.5%) were built of wood, and another 18.5 percent were brick. Bamboo houses constituted 9.7 percent, while both bamboo and bricks were used in 8.2 percent. The remaining 1 percent were built with other nonprocessed materials. Electricity was not available in most of the houses (85.1%) we surveyed. Of the houses that had electricity, 9.9 percent were connected to power utility lines, 2.6 percent used electricity supplied by generators, and 2.3 percent used batteries or other means.

Methods of Analysis

In the following chapters, the relationships between the use of mass media—newspaper reading, radio listening, magazine reading, and television viewing—on the one hand, and the various indices of development and aspirations on the other hand are analyzed. The basic statistical method used was the cross-tabulation, tested for significance by the chi-square. These same indices were also cross-tabulated with six demographic variables: age, sex, education, occupation, economic index, and religion.

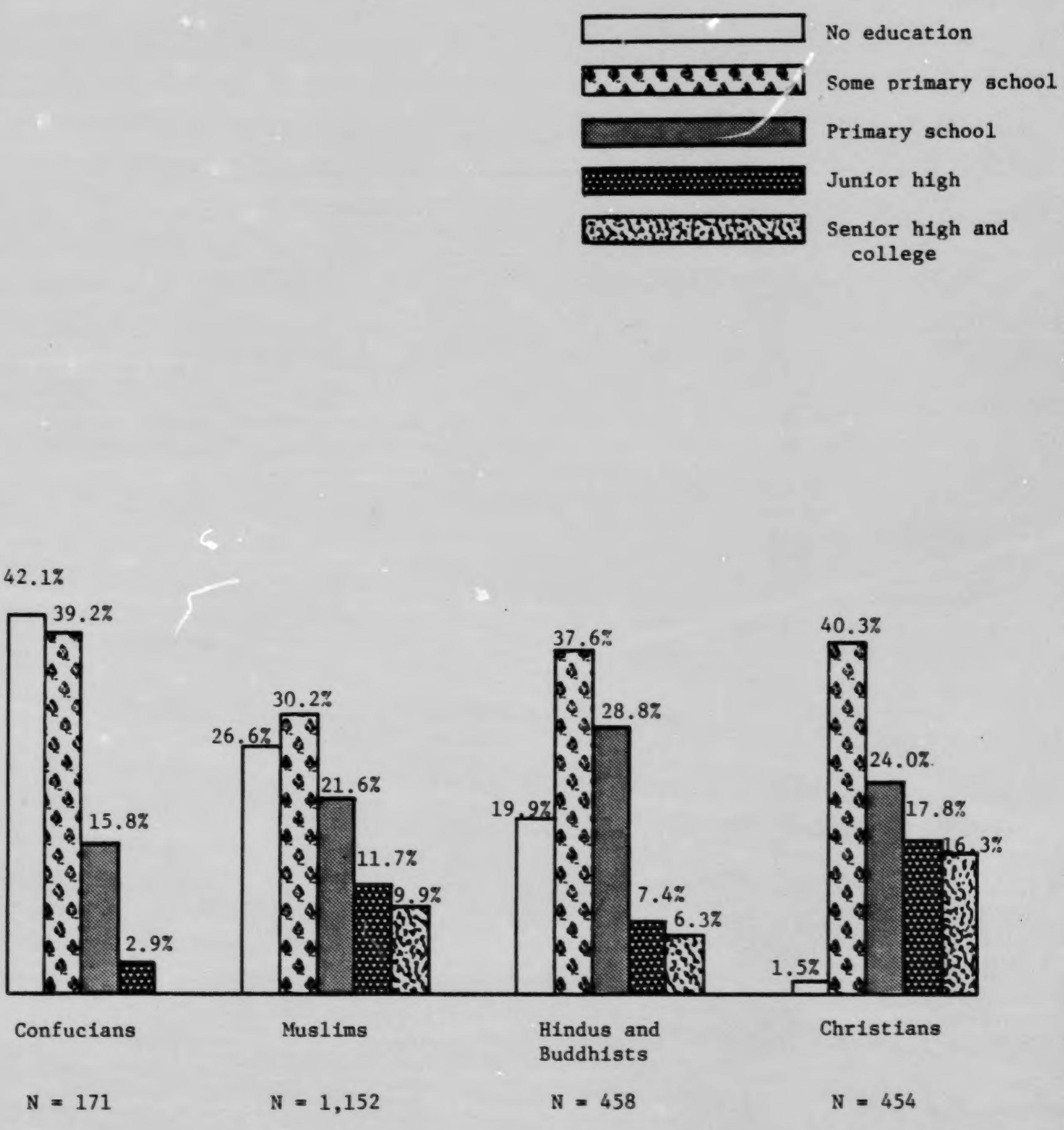


Figure 3.2. Educational Levels of Religious Groups.

Note: Categories may not equal 100% due to rounding off.

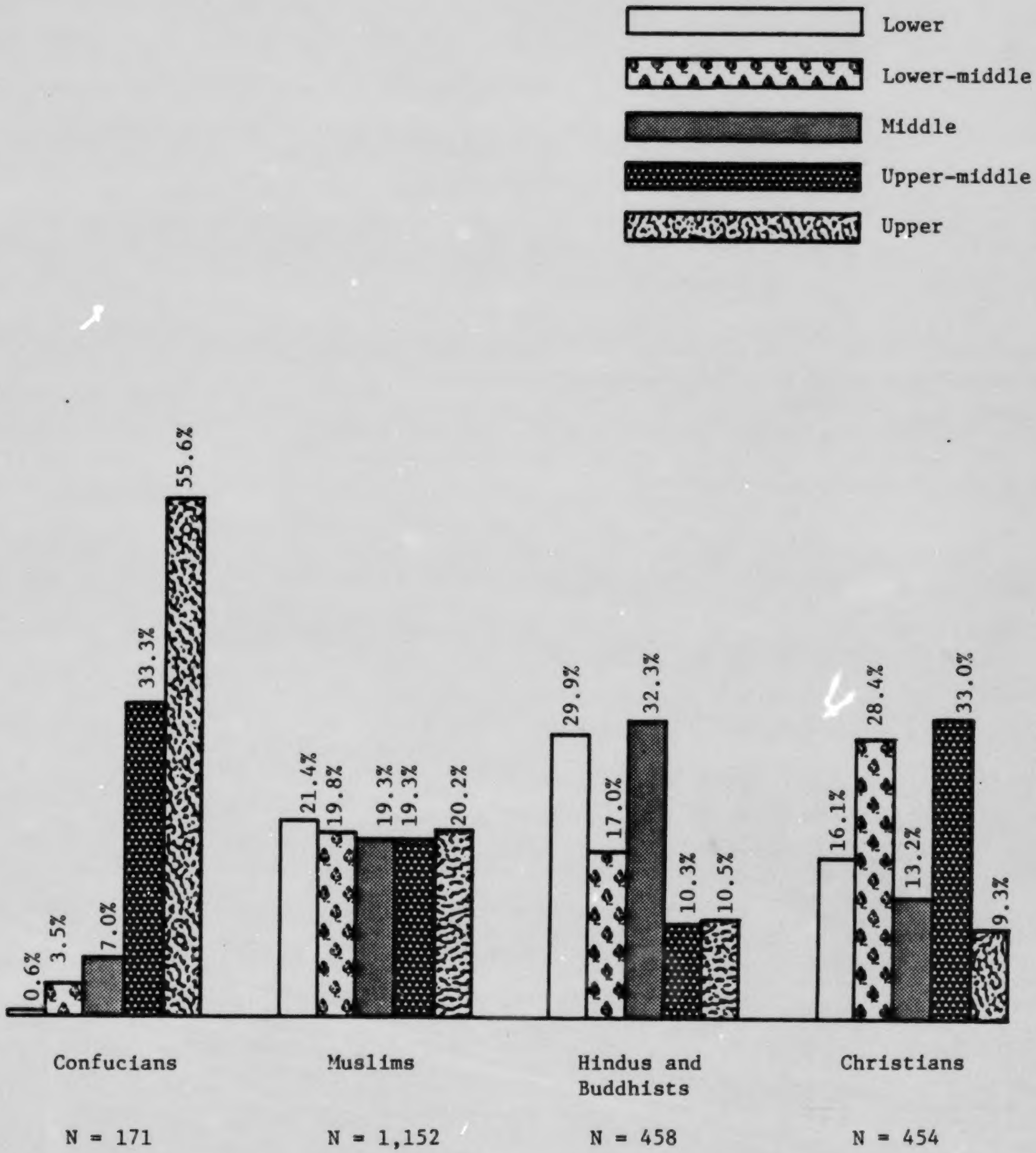


Figure 3.3. Economic Status of Religious Groups.

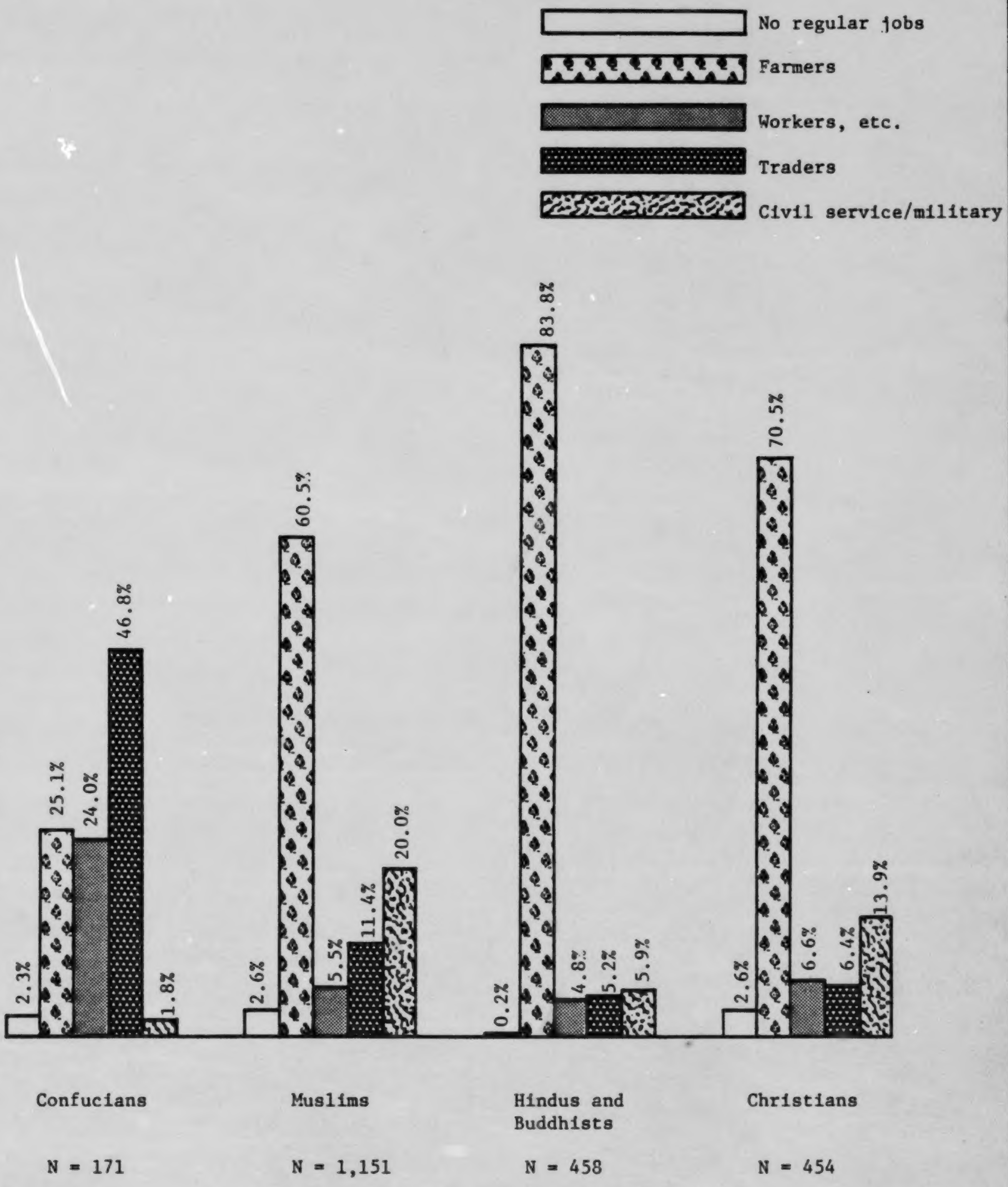


Figure 3.4. Occupations of Religious Groups

Since the use of mass media is often related to demographic variables, we may wonder whether a relationship found, say between newspaper reading and knowledge about family planning, might not be spurious. It is quite possible that those who are more highly educated read the newspaper and also know about family planning methods. If so, the relationship found is due to education. To test the possibility of spurious relationships, a multiple regression analysis was employed. Each variable was first converted to an ordinal scale to make the multiple regression analysis justifiable. Then each development index was taken as a dependent variable, and the four media-use variables and the six demographic variables were used as the independent variables in the multiple regression equation. The stepwise solution was employed. This analysis (1) shows us the total strength of the relationship between each dependent variable and the ten independent variables, and (2) identifies those independent variables that have real, not spurious, relationships with the dependent variables, in the descending order of importance. In the following chapters, only those independent variables whose relationships with the dependent variable are not spurious will be discussed.

The technical details of the multiple regression analysis are on file at LEKNAS-LIPI and the East-West Communication Institute and are available upon request.

Chapter 4: USE OF MASS MEDIA BY THE SAMPLE

Respondents were asked to give information concerning their use of five mass media: radio, television, magazines, newspapers, and movies. The overall pattern of use is shown in Figures 4.1 through 4.7.

It is obvious that radio is the dominant medium in terms of regular use. Over two-thirds of the respondents indicated that they at least occasionally used radio. However, even for radio, daily use was reported by only 23 percent. By contrast, 40 percent said that they read newspapers, 24 percent read magazines, and only 12 percent viewed television. While 42 percent indicated that they had seen movies, only 13 percent said that they had attended a movie within the last three months. The general situation, then, was one of relatively low use of the mass media by respondents in these villages.

There was a very strong relationship between the use of radio, television, newspapers, and magazines. Persons who were regular users of the latter three media had a high relative probability of also being daily users of the radio. The size of this probability was much the same for the three media: 43 percent of those who said they read magazines were daily users of the radio, and 45 percent of those who were television users listened to radio daily. Similarly, 41 percent of those who read national newspapers and 35 percent of those who read local newspapers were daily radio listeners.

And as we might expect, the relationship between use of the two print media was even stronger. Only 4 percent of the magazine readers said they did not read newspapers. Magazine readers were somewhat more likely—53 percent compared to 43 percent—to read national newspapers rather than local newspapers. Similarly, 71 percent of those who read national newspapers listened to the radio daily compared to 58 percent of those who read local newspapers.

There are significant differences in the reported use of all the media by the various age, sex, religious, educational, occupational, and economic status groups. Because radio was the dominant medium, in terms of regular use by the largest number of respondents, let us first examine the composition of its audience.

The three socioeconomic descriptions—education, occupation, and economic status—were all strong predictors of radio use. Daily use of radio was reported by 55 percent of those whose education extended through senior high school or beyond. Although there was an increase in the percentage making daily use at each successive level of education, the two most critical educational points appear to be whether or not one ever entered school and whether or not one continued on to senior high school. (Since the data combines those who went to high school and those who went to college, we cannot say whether or not that might also be a critical point.)

Almost six out of ten (59.2%) of those who never entered school said that they "never" listen to radio, contrasted with only 29.3 percent of those who started primary school. Daily listening was reported by 55 percent of those who went to high school, but by only 37 percent of those who stopped at junior

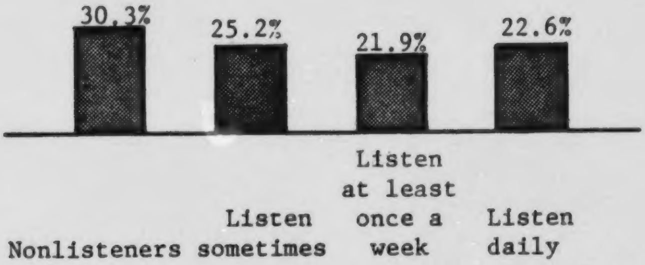


Figure 4.1. Radio Listening Habits.

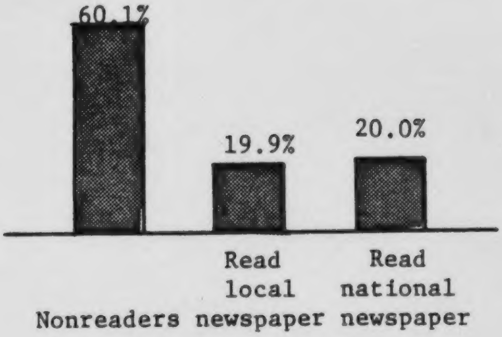


Figure 4.2. Newspaper Reading Habits.

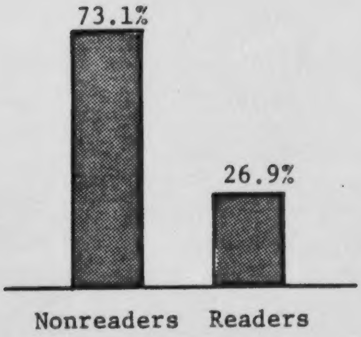


Figure 4.3. Magazine Reading Habits.

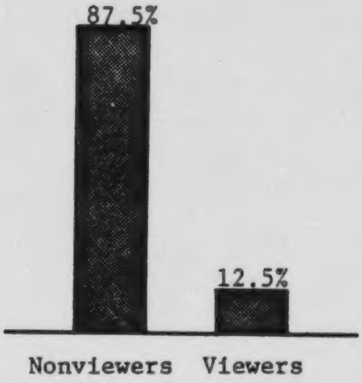


Figure 4.4. Television Viewing Habits.

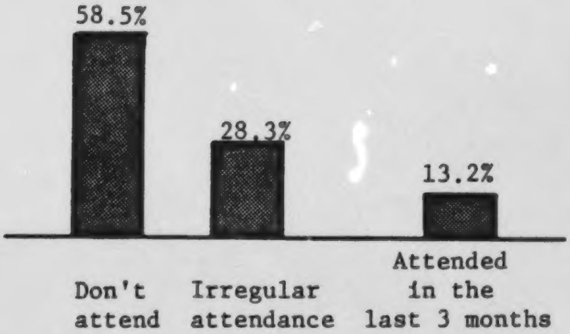


Figure 4.5. Movie Attendance.

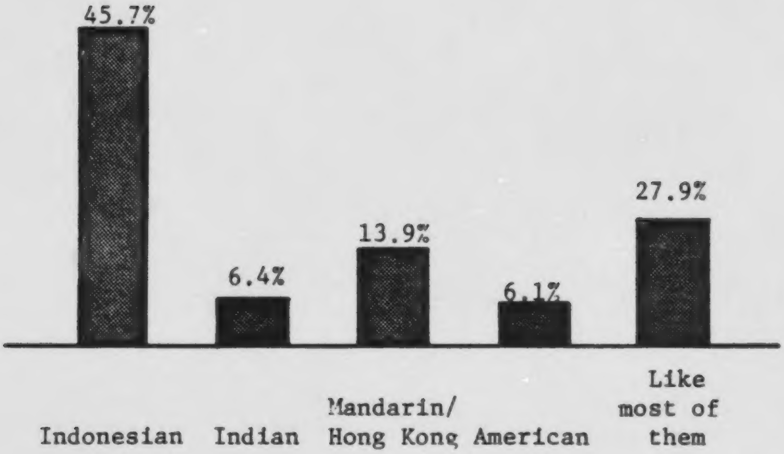


Figure 4.6. Movie Preference by Country of Origin.

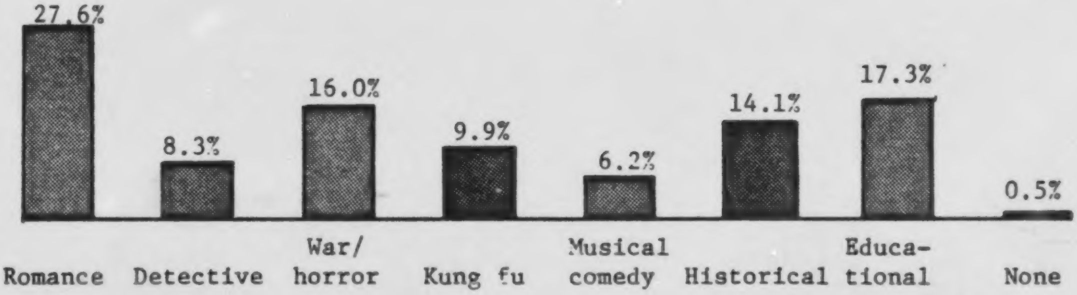


Figure 4.7. Movie Preference by Content Type.

high school, 23 percent of those who finished primary school, and 9 percent of those who had no schooling.

Those whose work fell within the "civil servants/military" classification were far and away the most frequent listeners of radio. Fifty-three percent of this group said they listen daily, contrasted with only 22 percent of the traders, 17 percent of the farmers, and 13 percent of the workers.

Daily radio listening declines from 43 percent of those in the upper economic group to 28 percent of those in the upper-middle group, 21 percent of those in the middle group, 16 percent of those in the lower-middle group, and only 7 percent of those in the lower group.

The same general pattern was found for the use of the other media, but with division points varying somewhat. For instance, the occupational categories showed stronger differences for magazine reading than for radio use. Two-thirds (67.6%) of the civil service/military group read magazines while the percentage of traders and farmers fell between 20 and 25 percent. It is of interest that the lowest readership group was workers, of whom only 12 percent said they read magazines.

Another occupational group difference was found in newspaper readership. Almost half of the civil service/military group read a national newspaper and another 38 percent read local papers. Thus only 16 percent of this group fell into the nonreader group for newspapers. In contrast, only 44 percent of the traders and about 30 percent of each of the other occupational groups were newspaper readers. And among the traders most readership was of local rather than national newspapers.

It is of interest that for television, the difference between the civil service/military and traders groups was much smaller: 28 percent of the former and 21 percent of the latter group reported television viewing. For all other groups, viewing was reported by 10 percent or less.

Economic status was strongly related to reading of both magazines and newspapers. The pattern for both media was a division between lower economic status persons and groupings of lower-middle and middle, upper-middle and upper. In each of the groups, there was an even division in the selection of local and national newspapers.

Educational level, as might be expected, was a stronger predictor of the two print media than for either radio or television. Magazine reading grew from 4 percent of those with no education to 14 percent among those with some primary schooling, 30 percent among those who finished primary school, 54 percent of those who went to junior high school, and 84 percent of those who went on to senior high school. Although newspaper reading generally was more common than magazine reading, the pattern was similar. Only 6 percent of those with no education said they read newspapers but half of those who finished primary school, 71 percent of those who went to junior high school, and 93 percent of those who went to senior high school did so. It is of interest that national newspapers were the dominant choice over local papers among both the junior and senior high school groups. Among those in the lower education groups who did read newspapers, the choice leaned toward local papers.

This latter finding, coupled with the newspaper choices of traders in contrast to those of the civil service/military group, strongly suggests the existence of groups within these villages who typify Robert Merton's concept of "cosmopolitans." These are the people within the village who do have an orientation and a set of interests that extend beyond the village and the local area. That these people should be those with connections to the government structure is not surprising. The very nature of their work responsibility coupled with their generally higher economic status and education would seem to provide stimuli for such "cosmopolitan" interest.

It is also interesting that sex did not seem to be as strong a predictor of the use of the print media as of the broadcast media. Magazine readership was the same among women and men, one out of four. Men and women read national newspapers in equal proportions, one out of five. Readership of local newspapers was higher among men (22%) than among women (11%), and as a result the overall newspaper readership was somewhat higher among men (42%) than among women (32%).

By way of contrast, 74 percent of the men were radio listeners compared to 52 percent of the women, and daily listening was reported by 24 percent of the men, but only 16 percent of the women. Television viewing was reported by 14 percent of the men and 5 percent of the women.

Four major religious groups were compared in the data analysis. The biggest group (half the sample) was the Muslims. Christians (both Roman Catholics and Protestants) and a group consisting of Hindus and Buddhists each comprised 20 percent of the sample. The remainder consisted of followers of Confucianism. The Confucians were the least frequent users of radio (only 5% listened daily), as well as the lowest in overall use: 40 percent said they did not listen to the radio at all. The level of daily listening was similar for the other three groups—ranging from 22 percent to 26 percent—but the Muslims had a larger percentage (34%) of nonlisteners than the Hindus and Buddhists (22%) and the Christians (24%).

The Muslims also contained the largest proportion of television viewers, (22%) followed by the Confucian group (10%). Television viewing was reported by a negligible proportion of the other two groups: 2 percent of the Hindus and Buddhists and less than 1 percent of the Christians. We want to point out that television was not yet readily available in Bali and North Sulawesi, where these groups live.

The Christians were by far the largest readers of magazines, 49 percent being readers compared with only 26 percent of the Muslims, 16 percent of the Hindus and Buddhists, and only 4 percent of the Confucians. Similarly, 68 percent of the Christians were newspaper readers compared to only 35 percent of the Muslims, 28 percent of the Hindus and Buddhists, and 25 percent of the Confucians.

Movie attendance was more likely among men (47%) than women (20%). Men (15%) were also more likely to have attended a movie within the last three months than were women, (6%). In terms of preference for movies from different countries, there were no striking differences between men and women. The most popular among both groups were Indonesian films followed by the response that the person "liked most of them." Romance films were the most popular type among both sexes, but this choice was made by a far greater proportion of women (49%) than of men (25%). Historical films were chosen by 19 percent of the women and 13 percent of the men, and educational films by 18 percent of the men and 10 percent of the women. Musicals/comedies were named by 12 percent of the women but only 6 percent of the men. Action-violence types of films showed some popularity among men—war/horror 17 percent, kung fu 11 percent, and detective 9 percent—but not among women.

Those who were unemployed or farmers were the least likely to have attended movies—83 percent and 64 percent, respectively, said they did not go to movies—while traders (44%) and the civil service/military group (42%) were the most likely to attend the movies. One out of four in both the latter groups said they had attended movies within the past three months.

Indonesian films were the dominant choice of both the civil service/military group (47%) and the farmers (50%). Traders and workers split rather evenly between Indonesian and Mandarin/Hong Kong films, with roughly a third of each group choosing each of these types. American films and Indian films did not score high with any groups, but of those in the civil service/military group, 13 percent named American films and 12 percent named Indian films. Romance films constituted the most frequent choice among traders (43%), workers (33%), and the civil service/military group (31%). Farmers were most likely to choose educational films (26%) with romance close behind (20%). Kung fu films scored some popularity with workers (21%) and traders (18%). Farmers, on the other hand, liked war/horror films (19%), while civil service/military respondents named detective (19%), historical and war/horror films (both 14%).

As might be expected, moviegoing was most prevalent among those in the upper economic group. Indonesian films were the dominant choice among all economic status groups. Mandarin/Hong Kong films, the only other group that gathered any sizable response, were being chosen by 23 percent of the upper group, 21 percent of the upper-middle group, and 12 percent of the middle group. Preference for film types was very scattered, although two interesting trends were in evidence. Educational films were the strong choice (45%) of those in the lower economic group. This choice falls to 26 percent among the lower-middle group, to 18 percent among the middle group, and to below 10 percent for the other two groups. The choice of romance films showed a reverse trend, growing from 17 percent of the lower group to 27 percent of the middle group, and to 33 percent of both the upper-middle and upper groups. Historical films showed their greatest popularity among the upper-middle group (21%) and the lower group (17%). War/horror films were named by 22 percent of the middle group, but by less than 20 percent of any other group.

Of those who reported no schooling, 73 percent said they did not attend movies. Those whose education did not extend beyond primary school were somewhat more likely to be in the movie audience. Just 40 percent of those who had at least some schooling and 44 percent of those who had finished primary school attended movies. Within each of these groups, about one in ten said they had been to a movie within the last three months. Half of those who had attended junior high school and 60 percent of those who had gone on to senior high school were moviegoers. Movie attendance within the last three months was reported by 22 percent of the junior high school group and 25 percent of the senior high school group.

The choice of Indonesian films, which was the predominant choice of all educational groups, was least strong among those with no education, (36%) compared to 51 percent among those in the junior high school group. The proportion in the other groups ranged from 40 to 49 percent. Mandarin/Hong Kong films were named by 27 percent of those in the no education group and 15 percent of those with only some primary schooling. American films scored their highest choice (18%) among those who had gone on to senior high school or college. The dominance of romance films was most marked (45%) among those with the most education, compared to 31 percent of the junior high school group, 25 percent of the primary school group, 23 percent of those with some primary education, and 22 percent of those with no education. Educational films were the most popular choice among those with no schooling (33%) and still a strong choice (23%) among those who had only some primary education.

This data, combined with the choices by the economic status groups reported above, suggests that films are seen as potential aids to advancement by the disadvantaged groups. This could have interesting implications for the potential of television as an tool for nonformal, remedial adult education.

Moviegoing was relatively rare among both Christians and Muslims. Seventy-one percent of the Christians and 66 percent of the Muslims said they did not attend movies. By strong contrast, 65 percent of the Confucians attended movies, and 38 percent said that they had attended one within the last three months. While almost as many (64%) of the Hindu/Buddhist group attended movies, only 9 percent had attended within the last three months.

One of the strongest group differences in media use was the movie preference of the various religious groups. More than half (from 50% to 53%) of the Muslims, Hindus and Buddhists, and Christians chose Indonesian films. But only 6 percent of the Confucian group chose the indigenous films while 73 percent of the Confucians chose Mandarin/Hong Kong films. The group with the highest preference for American films was the Christians (17%), while Muslims (12%) had the highest preference for Indian films. There were also very strong differences between the religious groups in their choice of film types. The Muslims showed no dominant preference, but scattered their choices over all categories. Their top choice, romance films, were named by 22 percent of the group, while kung fu films, the least popular, were named by 9 percent. The choices of the Hindu/Buddhist group were also scattered. They ranged from 35 percent for educational films to 24 percent for war/horror films, 16 percent for romances and 14 percent for historical films. Romance films (56%) were the overwhelming choice among Christians, with the next most popular group, historical films, named by only 18 percent. Romance (48%) was also the leading choice of Confucians, followed by kung fu (33%).

Summary

Media use by the Indonesian villagers was relatively low. Radio was clearly the dominant medium, in terms of general use. While two-thirds of the sample indicated that they do at least occasionally listen to radio, only 23 percent were daily listeners. Forty percent indicated readership of newspapers, 27 percent of magazines, and 12 percent watched television. Only 13 percent of the sample said they had attended a movie within the last three months.

There was a strong correlation between media use. There was also a strong general correlation between socioeconomic indicators and media use. More education, higher economic status, higher prestige occupations were all predictors of media use. This was particularly noticeable for the civil service/military occupational group. Members of this group were not only the most likely to be users of all media, they were also the most likely to read national, as opposed to local, newspapers. The pattern of relationships was strongly suggestive of the concept of "cosmopolitans," persons within the villages who maintain an orientation toward and act as a bridge to the larger world, developed by Robert Merton.

While there were only insignificant differences between the sexes in the use of print media, men were much more likely to be users of both broadcast media and the movies.

Muslims were the most frequent users of the broadcast media, Christians the most frequent users of the print media, and Confucians the most frequent moviegoers.

Generally there was a clear preference for Indonesian movies, the one exception being that Confucians preferred Mandarin/Hong Kong films.

It is of interest that those with little education and of low economic status showed a relatively high preference for educational films, while among other groups romance films were generally the dominant choice.

Chapter 5: VALUES AND FAMILY ASPIRATIONS

Tradition is deeply imbedded in the Indonesian culture. Education is a chief tool of aspiration. Therefore, in trying to understand better the values and aspirations of the people in our sample, we asked them to what extent they felt Indonesian values were still being adhered to, what they thought of the younger generation's religious and social standards, how satisfied they were with their own education and whether they were seeking any more education or special training, how far they wanted their children to go in school, whether they wanted their children to follow in their career footsteps, and, finally, what they regarded as the formula for "success" in life. It is not surprising that we found religion, along with the parents' occupational and educational experiences and economic status, to be related closely to most of the answers to these questions.

Their Assessment of Tradition

Nearly one-half of the people in our sample (44.9%) said they thought tradition is still being observed. About one-third (32.3%) said, "Yes, but less so." And one-fifth said tradition is not being upheld or declined to comment.

Hindus and Buddhists, in Bali, were the religious group most likely to feel that all is well with traditional values and behavior. The other three groups were less optimistic in answering the question, with Confucians least inclined to think tradition is being maintained. The proportions of the four religious groups expressing the opinion that tradition is still adhered to are shown in Figure 5.1.

Men were more inclined than women to think that tradition was firm, but there was relatively little difference by economic status, education, or occupation.

One finding of particular interest to us concerns the role of mass media. We shall use radio listening, newspaper reading, and magazine reading to illustrate the influence of mass media on values and family aspirations. On the whole, those who listened to the radio were more likely than nonlisteners to think that traditions were still being observed (Figure 5.2a). What is intriguing is the finding that as people listened to radio more, some of them became consistently less sure that people were fully observing traditions. The corresponding percentages who said traditions were being less observed were: nonlisteners (26.7%), those who sometimes listen (27.8%), those who listen at least once a week (37.7%), and those who listen every day (39.7%).

Whether the respondents did or did not read newspapers, about the same percentages said traditions were still being observed (Figure 5.2b). But greater percentages of readers—39.8 percent for local newspapers and 41.5 percent for national newspapers—than nonreaders (26.8%) felt that the observance of traditions was becoming less strong than in the past. The same picture applies to magazine reading (Figure 5.2c).

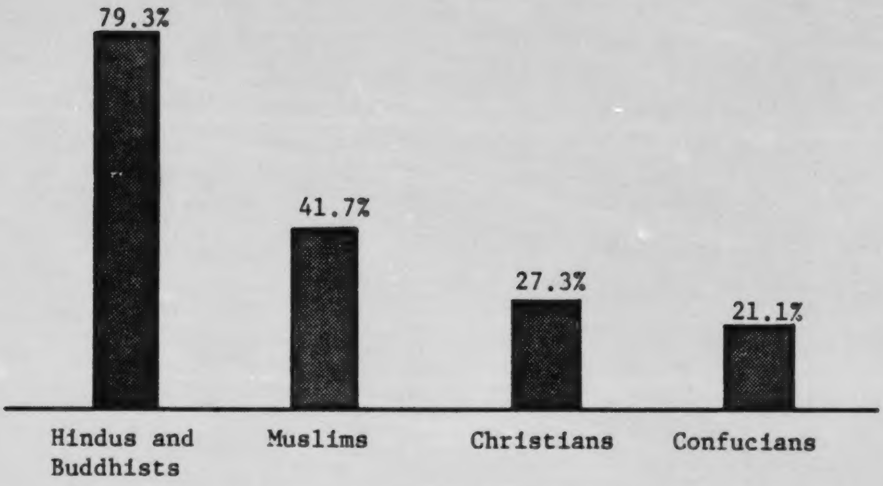


Figure 5.1. Percentage Saying Tradition is Still Adhered To, by Religion.

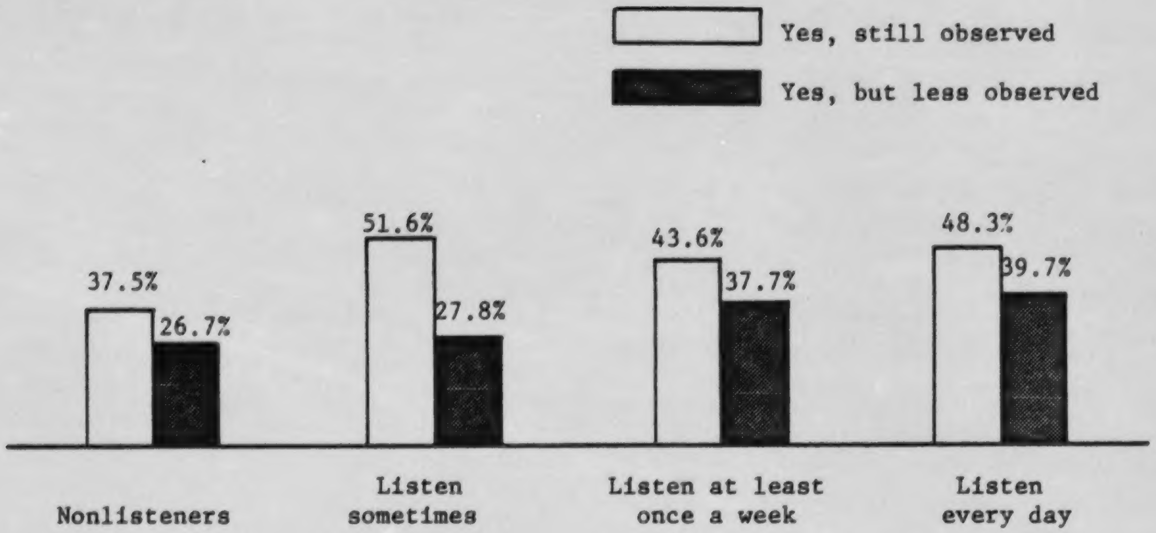


Figure 5.2a. Observance of Traditions, by Radio Listening.

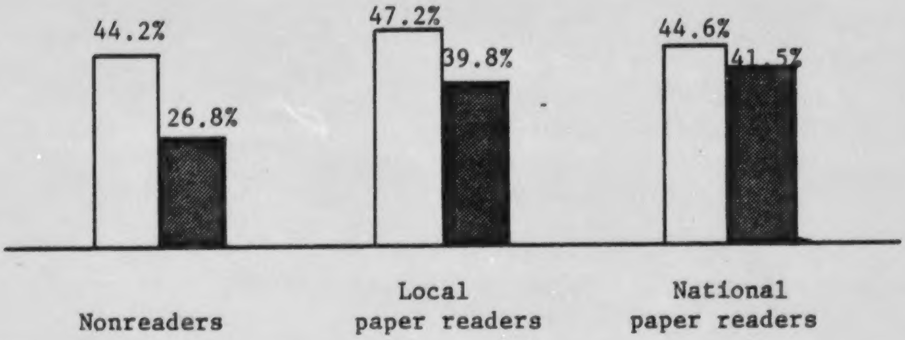


Figure 5.2b. Observance of Traditions, by Newspaper Reading.

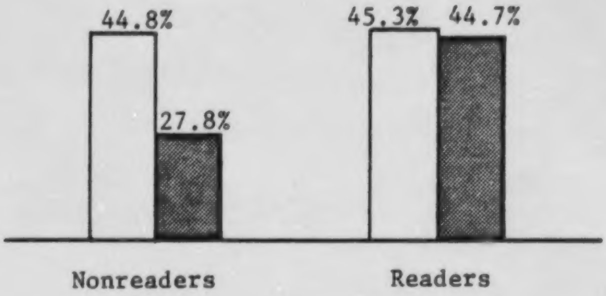


Figure 5.2c. Observance of Traditions, by Magazine Reading.

One gets the impression that while on the whole nearly half of the respondents still believed that traditions were being observed, those who were exposed more to the mass media tended to be somewhat ambivalent, perhaps because they were more aware of breaches of tradition reported in the media.

What They Think of the Younger Generation's Religious Ethics

Only 23.3 percent of the respondents, however, said they feel that young people still fully conform to traditional religious ethics. According to 39.4 percent, young people "did not fully" conform. Another 18.8 percent said young people did not conform, and 18.4 percent had no comment. That being the case, it is interesting to note what the sample's younger people themselves thought of their religious ethics. They gave a rather more favorable answer than did their elders. Of the 15-29 year age group, 30 percent, in contrast to 24.5 percent of the 30-39 group, 20.9 percent of the 40-49 group, and 19.0 percent of the over-50 group, said they believed that young people were still observing religious ethics. Only 14.5 percent of the respondents under 30, as contrasted with about 20 percent of older respondents, said that young people did not conform. Concern over the passing of traditional religious society, therefore, seems to manifest itself most strongly among elderly people.

Responses to this question about young people were sharply divided by religion. Once again, Hindus and Buddhists were more satisfied than other denominations with their children's religious beliefs and behavior. Of Hindus and Buddhists, 64.2 percent, compared to 21.8 percent of the next highest group (Christians), said that the young people were conforming. Muslims registered 10.8 percent approval, and Confucians only 2.9 percent. Farmers tended to be a bit more satisfied than other groups (suggesting a rural-urban difference), and males were a bit more likely to be satisfied with the traditionalism of the young people than were females. There were few other differences of any significance.

The Younger Generation's Social Ethics

What do they think of the younger generation's social ethics? In general, about the same as what they thought of the young people's religious ethics. About 22 percent said they felt the young people conformed to traditional ethics and practices. About 40 percent said they did not "fully conform." Only 18 percent said the younger generation "did not" conform, and 20 percent declined to answer the question.

Responses were divided very interestingly by religion. Table 5.1 shows how members of the different religious groups answered the question.

Thus we find the Hindus and Buddhists much more satisfied than the other denominations that their young people are following traditional social ethics. The Confucians were least convinced of that, and in fact more than half of them did not answer the question at all. About half the Muslims and the Christians say the young people do not "fully" conform to tradition. The Hindus and Buddhists were least likely to deny that their young people accept traditional social ethics; the Christian groups and the Muslims were most likely to say that their young people depart from the tradition. When one assembles the

Table 5.1

Opinion of the Younger Generations' Social Ethics by Religion (%)

Religion	They Conform	Do Not Fully Conform	Do Not Conform	No Comment
Hinduism-Buddhism	64.6	5.7	6.1	23.6
Christianity	15.2	45.4	22.7	16.7
Islam	9.9	52.2	22.0	16.0
Confucianism	2.9	32.2	13.5	51.5
Overall	21.7	39.7	18.2	20.4

whole pattern, about 60 percent of the respondents said that their young people conform wholly or in part, and 40 percent said they do not conform or are unwilling to discuss the matter.

As in the case of religious ethics, opinions became less favorable with age—28.8 percent of the 15-29 age group said the young people conform, but only 16.4 percent of the people 50 or over agreed with that statement. The percentage having a favorable opinion also went down as economic status went up: 29.9 percent of the lower economic group said the young people conform, as compared to 14.4 percent of the upper economic group. Farmers gave a more favorable estimate of the young generation's social ethics and behavior than did other groups—26.3 percent said they "conform," as compared to an average of about 15 percent for the other occupational groups. Males were apparently more satisfied with the situation than were females: 24.2 percent of men said the young people conform, but only 11.1 percent of the women. All these follow the pattern of opinions on religious ethics.

Results on media use were mixed. Nonlisteners to radio were less likely to think the young people were following traditional social ethics—for example, 16.7 percent said "they conform" as contrasted with 23.2 percent of the everyday listeners. Opinions of newspaper and magazine readers were the opposite of that: nonreaders had a higher opinion of young people's conforming behavior than did readers.

Satisfaction with Their Own Education

Turning to education, we then asked whether they were satisfied with their own formal education as it related to their present occupation. Those who said they were satisfied equalled 32.1 percent, and 6.6 percent answered very satisfied. On the other hand, 42.8 percent were dissatisfied, and 8.5 percent very dissatisfied. Thus on balance, more persons were dissatisfied than satisfied. And 9.7 percent had received no formal education at all.

Religion and occupation were the characteristics of the sample most likely to predict satisfaction or dissatisfaction with an individual's own education. Christians were the most likely to be satisfied; Muslims the most likely to be dissatisfied. These results are listed in Table 5.2.

Table 5.2

Satisfaction with Education, by Religion (%)

Religion	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
Christianity	4.9	61.5	30.4	2.9
Hinduism-Buddhism	4.4	39.8	37.8	5.9
Confucianism	4.8	26.8	42.9	7.7
Islam	8.5	18.1	49.5	12.4

Note: 17.9% of Confucians, 12.1% of Hindus and Buddhists, 11.4% of Muslims, and 0.2 percent of Christians are not included in this table because they have had no formal education.

Occupation is also closely related to satisfaction with one's education. Satisfaction increases with job income and white-collar jobs, as shown in Figure 5.3. Under the labels "Satisfied" and "Dissatisfied," respectively, we have combined "Satisfied" and "Very satisfied," and "Dissatisfied" and "Very dissatisfied." Perhaps the most interesting feature of Figure 5.3 is the way that dissatisfaction holds up although satisfaction rises with occupation. It suggests that there must be some unrealized desire for more education on the part of these people, and in the next section we shall see whether they are making use of existing opportunities to obtain it.

Satisfaction rose slightly with economic status and with amount of education, although the slope of the rising curve was not large. Differences between users and nonusers of the media were not large. The chief differences were those related to occupation and religion.

Seeking Additional Training

Given the amount of job-related dissatisfaction we have just seen, we might expect a large appetite in this population for vocational training. That did not seem to be the case. When we asked the sample, "Are you or any of your

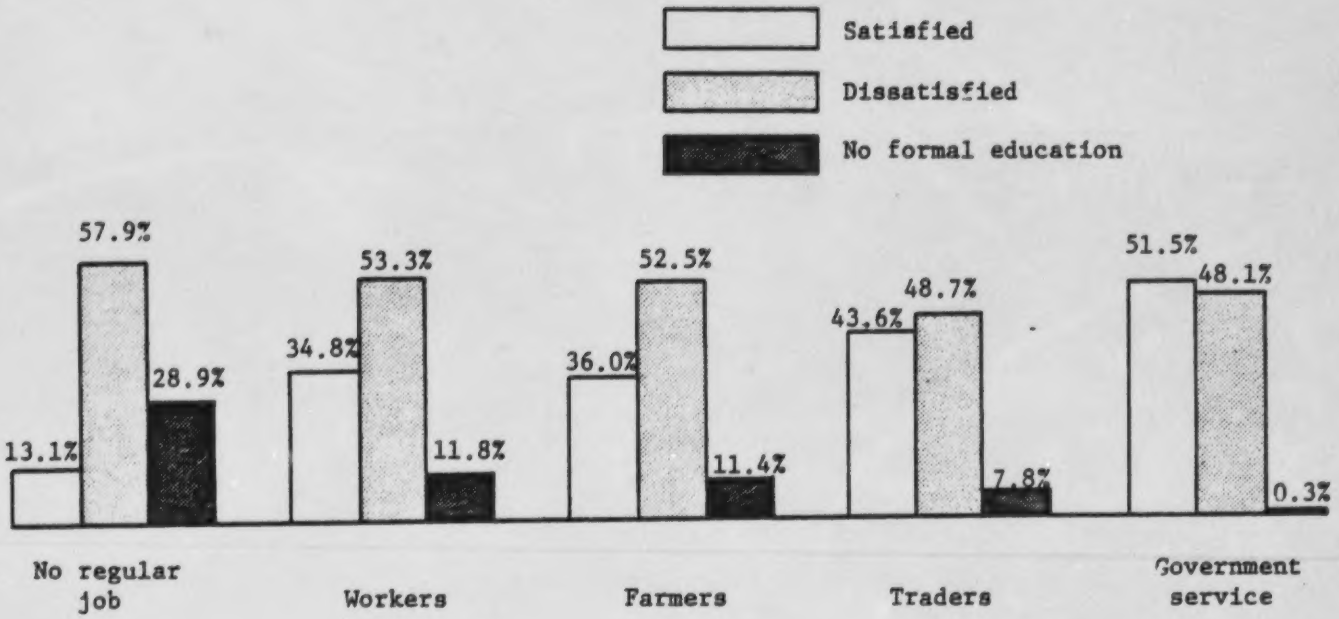


Figure 5.3. Satisfaction with Education, by Occupation.

family presently seeking vocational training?" 73.4 percent answered, "No." Whether this reflected scarcity of opportunities or lack of ability to pay is not clear. However, the number of families that sought such training rose with economic status (from 13.1% in the lowest economic group to 37.2% in the highest) and with the economic rewards of employment (from 20.5% among workers to 55.3% among civil service and military personnel), indicating that there may be a financial barrier in the way of larger enrollments. It also rose with the amount of education the head of the household had (from 23% among those who had only primary school education to 53.7% among those who had at least senior high school), suggesting that education begets education: the more one has had, the more one sees the usefulness of it.

There are also differences by religion. Confucians were the least likely of the four main groups to be seeking vocational education; Christians, the most likely. There were also significant differences by media use: the more listening and reading, the more likely a family was to seek additional education, suggesting that the media fuel the desire for economic improvement. Table 5.3 shows the percentage of families with at least one member seeking vocational training, set against that family's use of different media.

Table 5.3

Relationship between Media Use and Vocational Training

Media/Use	% Seeking Vocational Training
Radio	
Nonlisteners	13.8
Sometimes	23.4
Once a week	31.1
Everyday	42.9
Magazines	
Nonreaders	20.2
Readers	44.4
Newspapers	
Nonreaders	18.6
Local newspaper	37.9
National newspaper	39.7

What kind of training were they seeking? The most popular subject (mostly sought by women, presumably) was home economics. Second place was secretarial and bookkeeping skills (Table 5.4). As television comes into use we can expect the demand for electronics training to increase.

Table 5.4

Types of Vocational Education Sought

Type of Vocational Education	Sought by (%)
Home economics	9.5
Secretarial, bookkeeping	4.1
Auto mechanics	2.0
Beautification, beauty culture	1.4
Radio, TV electronics	0.4
Others	9.3

If They Had the Money, How Far Would They Educate Their Children?

When parents were asked this question, they answered as shown in Table 5.5.

Table 5.5 is a striking table. Of the parents who themselves had no formal education whatsoever, only 5 percent were willing to have their sons stop with primary school, and 57 percent wanted them to go as far as the university! Of the parents who had only primary school, only 3 percent were willing to have their sons receive no more than primary school education, and 65 percent were looking forward to giving their sons a university education. The higher the parent's education, the greater his or her ambition for his or her boys. Ninety-two percent of parents who had gone to senior high or university expected their sons to get a university education.

Their ambitions for their daughters followed precisely the same pattern, but at a slightly lower level. Of the uneducated parents, only 12 percent were content to have their daughters stop with primary school, and 39 percent wanted a university education for them. Table 5.6 shows the percentages of parents who hoped someday to see their daughters at the university, compared to the parents' own education.

Table 5.5

Parents' Aspirations for Sons' Education, by Parents' Education

Education They Had	Education They Want for Their Sons (%)			
	Primary	Junior High	Senior High	University
No education	4.8	14.0	14.4	57.2
Some primary school	2.9	7.2	21.1	64.9
Primary school	0.9	6.0	26.6	62.7
Junior high	0.6	1.3	14.8	80.6
Senior high and college	0.0	0.0	4.2	92.3

Note: These rows will not add to 100.0% because certain special goals parents expressed, outside formal education have been omitted. The same is true of other tables in this section.

Table 5.6

Parents Who Want Their Daughters to Attend the University, by Parents' Education

Parent's Education	Proportion Who Want Daughters to Attend University (%)
No education	39.0
Some primary school	48.2
Primary school	47.6
Junior high school	64.3
Senior high and college	83.9

In other words, here we have a population of whom only 10 percent have themselves gone as far as senior high school, but 68 percent want their sons and 52 percent want their daughters to go to the university. This is an impressive and moving testimony to the concern of these people for their children, but it may represent an ambition that neither the family's economic status nor the facilities of the educational system can satisfy.

Parents' education is thus one of the determining variables in setting educational goals for their children. Another is religion. Muslims and Christians set higher educational goals for their children than do the other two main groups. Hindus and Buddhists, on the other hand, are content to think of 12 percent of their daughters and 6 percent of their sons ending their education with primary school, and less than half of them reaching the university. Table 5.7 shows the percentages of parents, by religion, who wanted their sons and daughters to go as far as the university.

Table 5.7

Parents Wanting Sons and Daughters
to Attend the University, by Religion

Religion	Parents Wanting University Education for: Sons (%)	Daughters (%)
Christianity	70.5	66.8
Islam	77.7	54.7
Confucianism	55.4	48.5
Hinduism-Buddhism	44.4	36.1

Another related variable was economic status. This was related to the parents' education, and therefore, as might be anticipated, the goals for their children's education went up parallel to the ability to pay for more education. Even the lowest economic class, however, had high ambitions for its children. Only 7 percent of persons in this class were content to have their sons stop with primary school (14% were satisfied with this ambition for their daughters). Twelve percent wanted them to go at least to junior high school, 21 percent to senior high school, and no fewer than 51 percent to the university! On the other hand, of the upper class only 12 percent and 18 percent were satisfied with even senior high school for their sons and daughters, respectively, while 82 percent of the sons and 69 percent of the daughters were being pointed toward the university.

Figure 5.4 shows the percentage of sons and daughters whom parents in the different economic groups wanted to send to the university:

56

Figure 5.3. Satisfaction with Education, by Occupation.

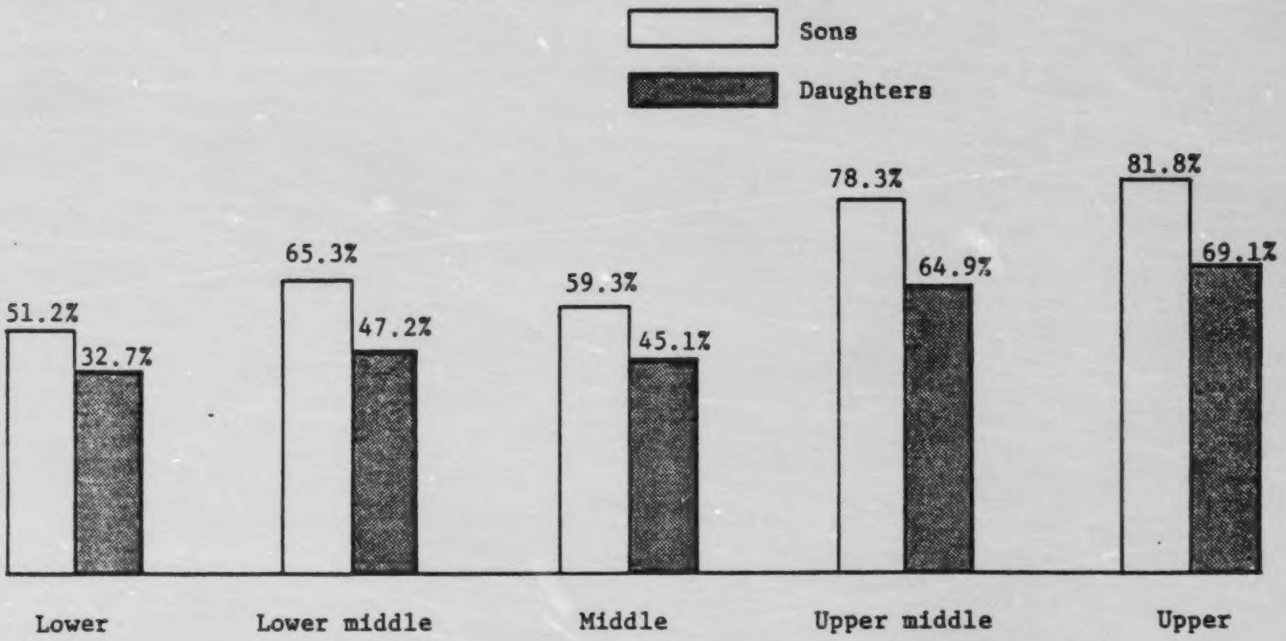


Figure 5.4. Percentage of Sons and Daughters Parents Want to Send to the University, by Economic Group.

Up to this point, we have been quoting the responses of parents without differentiating between mothers' opinions and fathers' opinions. It is interesting, therefore, to see what order of educational ambitions fathers had for their children, as compared to mothers, and how these were different for sons and for daughters. As we have seen before, the ambitions for daughters were a bit lower than for sons. Given that distinction, however, there was less difference between fathers' and mothers' opinions than we might expect. Fathers actually wanted a higher proportion of their daughters to go to the university than did mothers—and mothers, on the other hand, wanted more of their sons to be university students than did fathers (see Table 5.8).

Table 5.8

Mothers' and Fathers' Aspirations for
Sons' and Daughters' Education, by Parents' Education

	Educational Ambition for Sons (%)			
	Primary	Junior High	Senior High	University
Mothers	4.4	3.6	16.9	70.7
Fathers	1.8	7.5	18.8	67.2
	Educational Ambition for Daughters (%)			
Mothers	8.9	14.0	25.4	46.6
Fathers	6.1	13.3	21.8	53.3

Finally, it should be added that more use of the media—radio, magazine, newspaper—went with higher educational goals for children. We cannot be sure that media exposure was actually a cause for higher goals, and certainly it was not a sole cause inasmuch as education and economic status have something to do with ability to possess a radio, newspaper, and magazine, as well as having had an effect on the opinions of media users. But the regression analysis showed that media contributed something on their own to parents' responses on this topic. And even without those statistics, it is impressive to see how the curves of media use rose parallel to the rise in ambitions for children's education. We can illustrate with figures on newspaper reading. The percentages are proportions of different kinds of readers who want their sons or daughters to go as far as a certain educational level (Figure 5.5).

Should the Child Follow in the Parents' Footsteps?

Asked whether they wanted their children to follow in their career footsteps, the overwhelming majority of adults in the sample said that such a

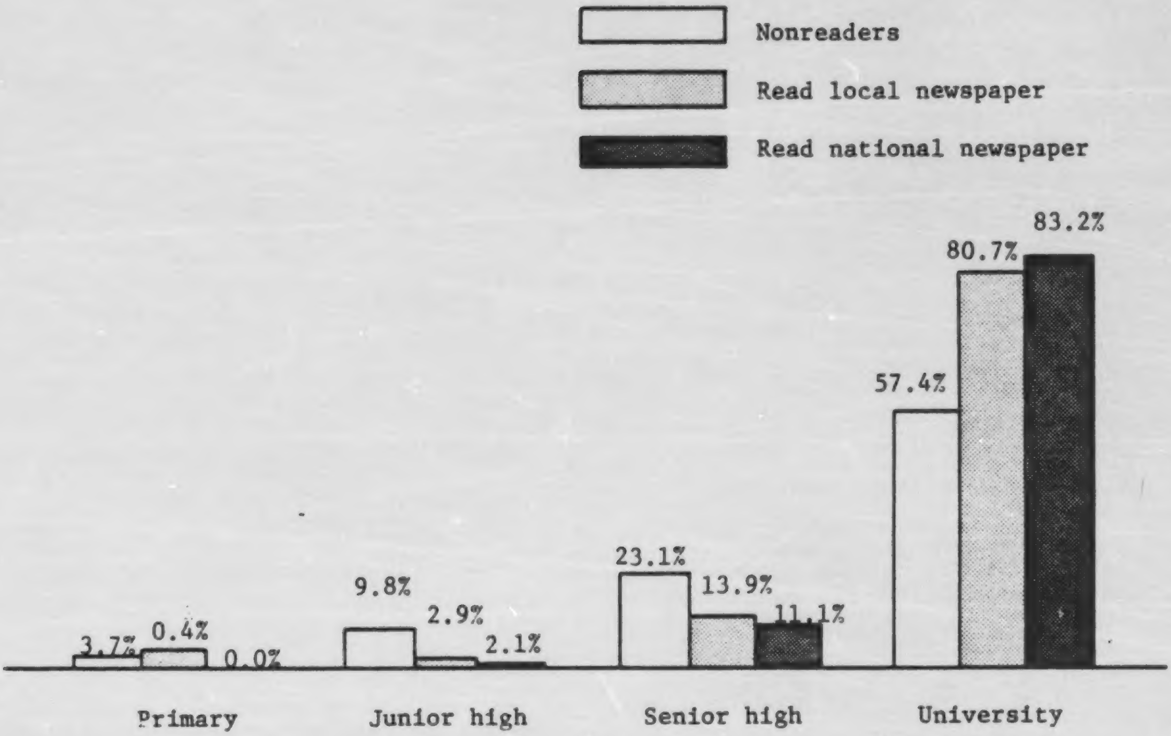


Figure 5.5. Correlation of Newspaper Readership and Parental Aspirations for Childern's Education.

decision should be left up to the children. Two variables—religion and occupation—made a difference in how the question was answered.

Confucians (30.9%) were most likely to say that they wanted their children to follow in their footsteps, and least likely (1.8%) to say they did not want that to happen. Muslims were within a percentage point of the Confucians in wanting their children to follow them, but 20 percent said they did not want their children to do that. Least inclined to see their children following in their footsteps were the Hindus and Buddhists, whose favorable answers were only 19 percent, and unfavorable answers, 24.8 percent. Most willing to leave the decision up to the child were Christians (81.7%), followed by Confucians (67.3%).

The parents in jobs with higher monetary rewards were most willing to have their children follow them. Thus, for instance, 42.5 percent of those in civil and military service and 33.6 percent of the traders favored their children following their careers, but only 17.7 percent of the farmers and 17.6 percent of the workers felt that way, and, as we might surmise, only 3 percent of those without any regular job. On the other hand, 21.6 percent of the farmers said they did not want their children following them into farming. That was almost twice as high as the average of all the other occupational groups.

What Occupation Would They Like Their Children to Have?

Overwhelmingly the parents in our sample wanted their children to go into government service, civil or military. This choice was expressed by 65.2 percent of the sample. The next choice, farming, was favored by only 13.2 percent. Traders and self-employed jobs followed with 10.6 and 7.0 percent, respectively. And only 4 percent wanted their children to be teachers—raising the question of where the teachers are going to come from to fulfill the unmet educational needs described earlier in this chapter.

Only the Confucians went against this current. Supposedly mostly traders themselves, 60.2 percent of them said they wanted their children to go into trade (as opposed to 11.9% for government service and 19.5% for farming). The Hindus and Buddhists gave a large vote to farming (25.1%), but 58.3 percent of them still preferred government service for their children if they could get into it. Christians gave the largest vote (12.9%) to self-employment (supposedly including the professions), but also one of the largest votes (69.7%) to government service.

In general, persons in a given occupation wanted their children to go into that—farmers wanted them to go into farming, traders into trade, government servants into government service, and so forth. The attraction of government service also went up slightly with the amount of media use. But the preference for civil and military service was so great that it hid the influence of most other variables.

Motivation for Seeking Education

We have seen that there was an enormous desire to provide more education for children than the parents had, although this was not supported very strongly by the numbers who were seeking more education. Now, what was the reason for these educational aspirations? We asked the sample what their motivation was for seeking more education for their children or themselves.

The answer was clear and direct. Education was sought by 71.6 percent of the respondents to raise living standards or get a better job—for themselves or their children. No other answer was given by even one-tenth as many people. The reasons given for wanting more education included being able to pass the civil service examination (7.1%); improving their status (6.6%); and meeting religious obligations (6.4%). But the great majority were simply looking for a way to live better.

Aspiration for this better and more comfortable life rose slightly with age (about 74% of the group over 50 as compared with 68% for the 15-29 age group), with education (81% of those with at least senior high school as compared with 65% of those with no education), and with present living standards (77% of those in the upper economic group as compared to 65% in the lower). There were differences, as usual, by religion. Christians were the most likely to say they wanted to raise living standards, Muslims to want more education to meet religious obligations, and Confucians most likely to seek more training to improve their status. Hindus and Buddhists, on the other hand, were most likely to say they were responding to peer pressure when they seek further education. And men were more likely than women to say they are seeking to raise living standards. These differences are not large, but significant.

What Is the Main Reason for Success?

Finally, in an effort to understand better the value and aspiration patterns that relate to Indonesia's development effort, we asked the sample what in their opinion was the main factor in, or reason for, success.

Overall, 59.9 percent said success came from hard work. Good luck or good timing was the reason given by 18.3 percent, while 9.6 percent said it depended on planning. Austerity—saving, doing without luxuries, living below one's maximum standard, and so forth, was mentioned by 2.6 percent, and 9.5 percent frankly said they didn't know. These answers were interestingly divided by religion, education, economics, and sex.

Christians were the most likely to ascribe success to hard work; Confucians, the least likely. On the other hand, Confucians were more likely than other groups to say that success depended on planning, and the most likely to ascribe it to "austerity." Protestants and Catholics were significantly less likely than the other religious groups to mention good luck and good timing. Table 5.9 shows these religious differences. The "don't know" answers are omitted.

Many of the differences by education were predictable. People with no education were by far the most likely to say they didn't know what factors contribute to success—22 percent as compared to an average of about 5 percent for other educational groups. They were also the least likely to ascribe success to hard work—53.5 percent of them did so, as compared to over 60 percent for all the other groups. And they were the least likely to relate

Table 5.9

Main Reason for Success, by Religion (%)

Religion	Good Luck	Austerity	Hard Work	Planning
Confucianism	20.5	8.8	38.0	17.0
Islam	20.9	2.6	55.9	10.1
Hinduism-Buddhism	18.3	2.8	63.5	6.3
Christianity	11.0	0.0	74.7	9.0

success to planning—half as many of them as the next smallest group, one-fourth as many as the largest group. On the other hand, the highest educational group (those who had gone at least to senior high school) were more likely than any other group to relate success to hard work and to planning, the least likely to ascribe it to good luck. Education does not teach an easy road to success.

Differences by economic status were in many respects like those related to education. Those in the lowest economic group were the most likely to be unable to state any reason for success and the least likely to relate success to hard work or to planning. Members of the upper economic group, on the contrary, were most likely to relate it to planning and to hard work.

There was one interesting difference by sex and one by amount of media use. Three times as large a proportion of women as of men were unable to give a reason for success in life. And in the case of use of each of the mass media, more use was likely to be related to more respect for planning as a road to success.

However, let us not lose sight of the main finding. Despite these minor differences, in each of the cases we have mentioned by far the largest proportion of answers said that success came from hard work.

Summary

Tradition in Indonesian culture is closely bound to religion. Hopes and plans for education closely reflect aspirations. Therefore in this chapter we have tried to inquire into these related areas.

Is tradition still being maintained in Indonesia? Forty-four percent of our sample said it was; 32 percent said, "Yes, but less so than in the past." Hindus and Buddhists, in far greater proportion than other religious groups, thought tradition among their people is still being adhered to. Those who used the mass media more seemed to be ambivalent.

Are people in the sample satisfied with the extent to which the younger generation follows traditional religious and social ethics? About one-fifth of the sample thought the young people fully conformed, another fifth said that they did not conform, and three-fifths answered that they conformed but not fully. Here again, Hindus and Buddhists were more satisfied than other groups.

Turning to education, we asked people whether they were satisfied with their own education, in relation to their present job. Only about one-third were satisfied, and one-half were dissatisfied. As we might expect, those in high paying jobs were most likely to be satisfied. However, only about one-fourth said they or someone else in their family were seeking additional training. (Home economics was the most popular subject of this additional study.)

If they had the money, how far would they send their children in school? Of the people in the sample, only about 10 percent had themselves gone as far as senior high school. Nevertheless, 68 percent of them wanted their sons, and 52 percent, their daughters, to go to the university. Of course, the aspiration for more education for their children correlates positively with more education, high economic status, and more exposure to the mass media.

What goals did they have in mind for these children they wanted so much to educate? For example, did they want their children to follow in the parents' occupational footsteps? The overwhelming majority said that this decision should be left to the children. Confucians, Muslims, and in general parents with higher paying work, were most willing to have their children follow in their footsteps. The great majority of all parents in the sample hoped that their children would go into government service, civil or military. Farming and trade were distant second and third choices. Only 4 percent wanted their children to become teachers.

What are their motivations for seeking more education for their children or themselves? An overwhelming majority said to raise living standards and get a better job. And finally, what do they consider the main reason for success? This answer, too, came back clearly: hard work. Sixty percent said success was chiefly the product of hard work. Good luck and planning were alternatives; 18 percent said success depended on good luck and good timing, 10 percent that it depended on planning. Confucians, better educated persons, and persons in higher economic brackets were most likely to depend on planning; Christians to favor hard work; and Muslims to ascribe success to good luck and timing.

Chapter 6: ECONOMIC BEHAVIOR AND GOALS

Savings and Capital Formation

In our sample, more than two-fifths (41.6%) had some savings. Not surprisingly, the higher the economic status, the higher the proportion of respondents who had savings. Of the approximately one-fifth of respondents who were classified at the lower end of the economic scale, only 18.7 percent had savings. This proportion rose consistently until it reached 62.2 percent of the top-most economic status group (Figure 6.1).

The percentage of respondents who had savings was lowest among those who had no regular jobs (10.6%). Just over one-third of the farmers (36.7%) and the workers (37.8%) had savings. The highest percentage of savers was among traders (58.3%), followed closely by those who were in the civil service or the military (55.8%).

Beyond these findings, which one would more or less expect, some interesting and consistent trends emerge. The higher the education, the higher the percentage of respondents who had savings. The percentage rose steadily from 23.3 percent in the no education group to 60.7 percent among those who had gone to senior high school or college (Figure 6.2).

Radio listening was a consistent factor. Among the nonlisteners, 28.9 percent saved. The corresponding percentages were 37.6 percent among those who sometimes listened, 51.1 percent among those who listened at least once a week, and 53.6 percent among those who listened every day. The same patterns were found among newspaper readers and magazine readers. Only 31.6 percent of those who did not read any newspapers had savings, while among the local newspapers and national newspaper readers the percentages were 56.7 percent and 56.4 percent, respectively. The proportions were just about the same for magazine reading: 35.6 percent among nonreaders and 57.9 percent among magazine readers. Of those who viewed television, 58.1 percent had savings, as compared to 39.2 percent of those who did not watch.

There were differences in terms of religion and sex. The Catholics and Protestants as a group had the highest proportion of savers (52.2%), followed by the Confucians (48%), Hindus and Buddhists (38.4%), and Muslims (37.8%). Males had a higher proportion of savers (42.8%) than females (37.5%).

What did the respondents do with their savings? Using those who had savings as a base for analysis, we found nearly one-third (28.6%) kept their savings at home, and 19.5 percent bought jewelry. Thus nearly half of the savers had their assets immobilized. Another 22.4 percent lent their savings to members of their family, neighbors, and friends. Almost the same proportion (23.3%) made deposits to earn interest either from community savings organizations or commercial moneylenders. Only 6.3 percent invested in business. When we combine the last two categories, approximately 30 percent of the savers could be said to have actively contributed to the process of capital formation.

Who were those who contributed? Age was definitely not a relevant factor, as the proportion of contributors remained between 29.4 percent and 29.9

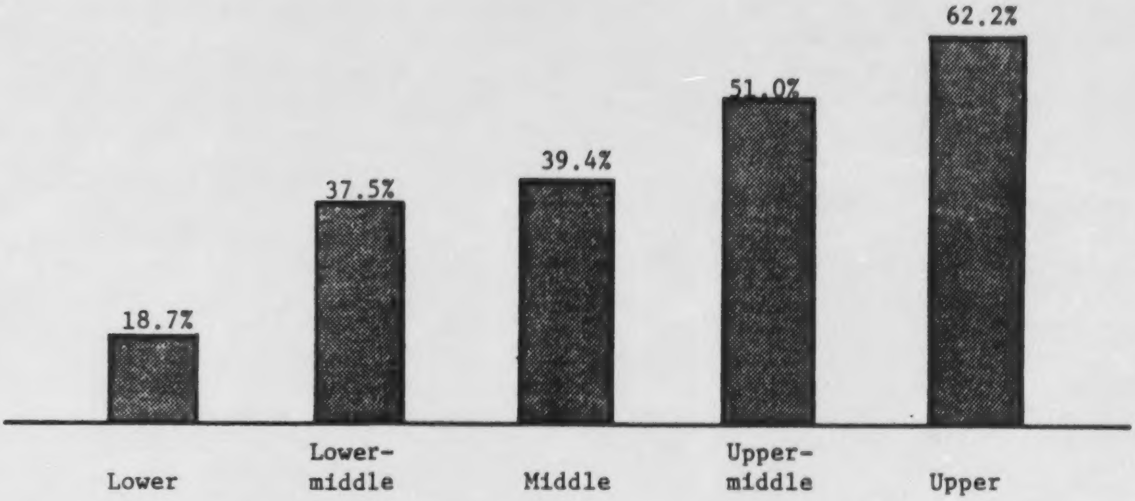


Figure 6.1. Percentage of Savers, by Economic Group.

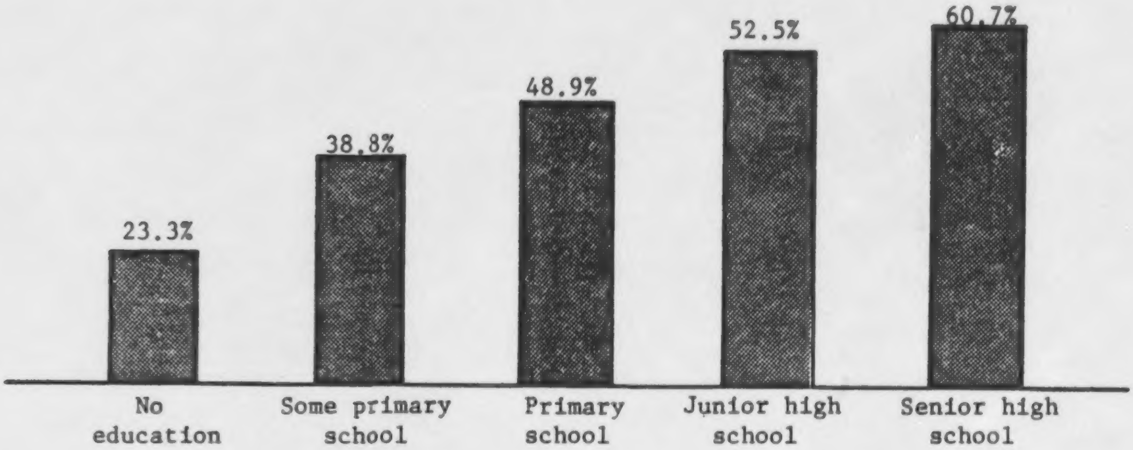


Figure 6.2. Percentage of Savers, by Education.

percent over all age groups. Nor was sex of any significance. The proportions of active contributors were 30.8 percent for females and 29.4 percent for males.

One would expect economic status to be related in some way to the use of financial resources for capital formation. Indeed, respondents in the lower economic status group had the lowest percentage, 9.3 percent. Although on the whole the corresponding percentages in the upper middle and upper strata wre higher than those in the middle and lower middle strata, the trend was less than clear (Figure 6.3).

In the context of these negative or somewhat ambiguous findings, the positive and consistent factors seemed more pronounced. The higher the level of education, the higher the proportion who used their savings for capital formation, from 8.1 percent among those having no education to 60.9 percent among those with high school or college education. (Figure 6.4).

Radio listening is a consistent factor. The higher the frequency of listening, the higher the proportion who used their savings for capital formation, with a big jump from 24.7 percent among those who listened at least once a week to 48 percent among those who listened every day (Figure 6.5).

Magazine readers (47.1%) were far more likely to contribute to capital formation than nonreaders (19%). Among those who were not newspaper readers, only 13.6 percent used their savings in this way, as compared with 37.5 percent among readers of local newspapers, and 48.4 percent among readers of national newspapers. The percentage was slightly higher among television viewers (33.9%) than among nonviewers (26.5%).

In terms of occupational categories, those who were in the civil and military services had the highest proportion (63.5%) of actively contributing to capital formation. The corresponding percentages in other groups were: 20.8 percent for farmers; 20.4 percent for workers; 23.3 percent for traders; and 0.0 percent for those who had no regular jobs (Figure 6.6).

Investing their savings for capital formation appeared to be a strong characteristic among the Protestants and Catholics, as nearly half of them (49.7%) did so. The corresponding percentage among the Muslims was 30.6 percent. By contrast, the Confucians, who were mostly well-to-do traders, had the lowest percentage, 8.5 percent, whereas the Hindus and Buddhists were the next lowest, 9.7 percent. The Confucians tended to keep their savings at home (40.2%), and the Hindus and Buddhists were most likely to buy jewelry (35.2%).

Because savings were limited only to those who could afford them, not everybody, we asked all respondents a projective question: What would you do if you had Rp100,000? We used this figure because Rp100,000 was a sufficiently large amount which people in rural Indonesia could use to get something done, but not so huge as to be beyond their imagination. As it turned out, only 4.6 percent of the respondents could not tell what they would do with it.

The specific answers were classified into six categories. The largest (35.6%) was for improvement of their homes. Next (25%) was for business investment, followed by purchase of land (15.4%), also a form of investment. Another 7.5 percent would use the money to advance their education, while 5.3

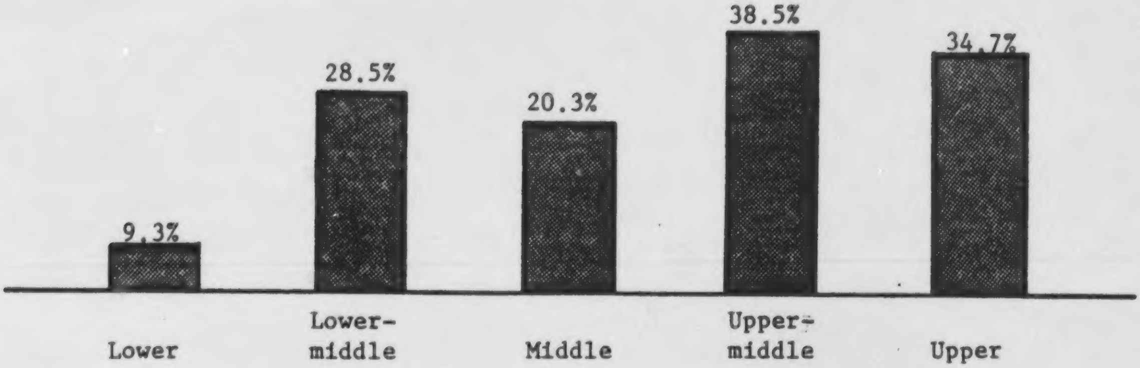


Figure 6.3. Percentage with Savings Involved in Capital Formation, by Economic Status.

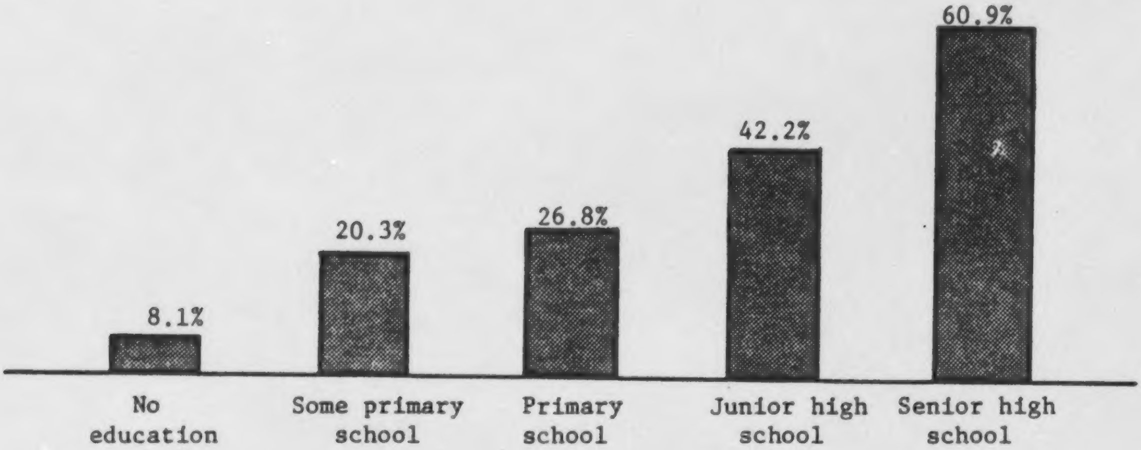


Figure 6.4. Percentage with Savings Involved in Capital Formation, by Education.

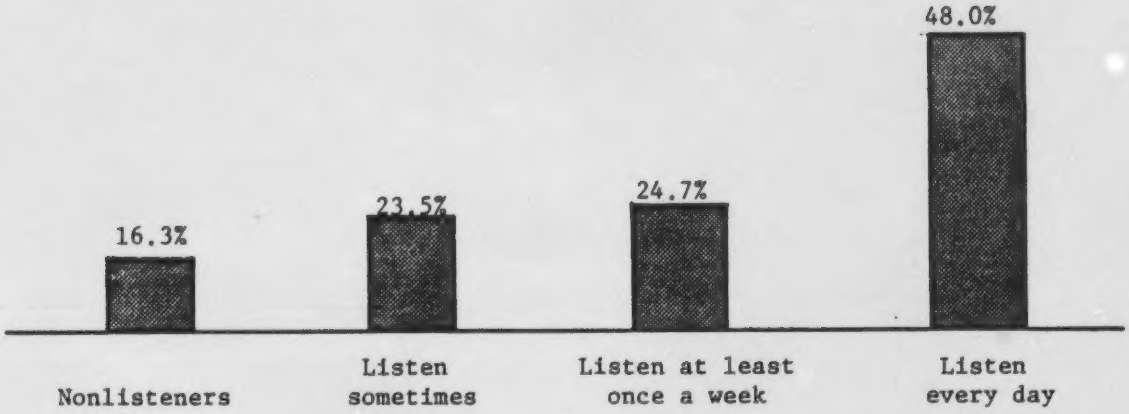


Figure 6.5. Percentage with Savings Involved in Capital Formation, by Frequency of Radio Listening.

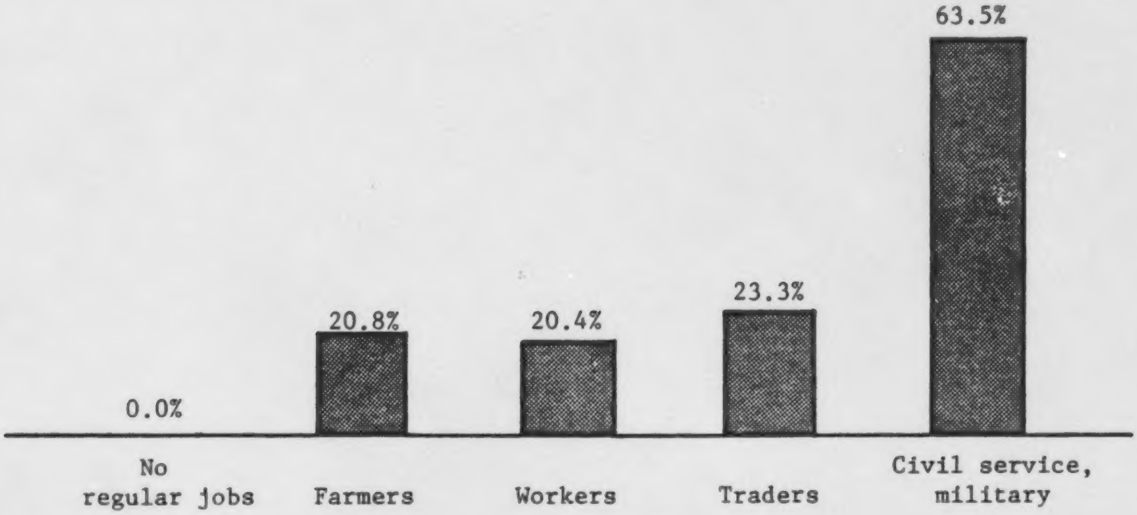


Figure 6.6 Percentage with Savings Involved in Capital Formation, by Occupation.

percent would put it into savings. The remaining 6.6 percent gave miscellaneous answers that were not numerous enough to justify separate categories. They included travel, gambling, and purchase of various items such as radio receivers, cassette recorders, television sets, jewelry, motorbikes, and even automobiles.

Those who could not answer this question were most often individuals who had no education, no regular jobs, and low economic status. Nonlisteners of radio, nonreaders of newspapers and magazines, and females were more highly represented in the "don't know" group.

The lower the economic status, the greater the proportion of respondents who would use the money for home improvement (Figure 6.7).

Radio nonlisteners, nonreaders of magazines, nonreaders of newspapers, and nonviewers of television had higher proportions of such answers than the listeners, readers, and viewers. The Hindus and Buddhists had a much higher proportion of home improvement responses than other religious/ethnic groups.

There are consistent trends showing that the higher the economic status and the higher the level of education, the higher the proportions of people who would put the money into savings. The Protestants and Catholics as a group had a far greater proportion of respondents who wanted to save the money than other religious/ethnic groups. Those in the civil and military services tended to prefer savings more than other occupational groups. Newspaper and magazine readers gave this answer in greater proportions than nonreaders.

Farmers were more likely to want to buy land than other occupational groups. Both the Muslims and the Christians had much higher proportions of this response than the Confucians, Hindus, and Buddhists. No other clear differences were found regarding land purchase as a preference.

Regarding the use of the money for education, the only consistent differences we found had to do with the use of mass media. This answer was found more frequently among everyday and weekly listeners to radio than among occasional listeners and nonlisteners, and more frequently among newspaper and magazine readers than among nonreaders.

Among those who wanted to use the money for business investment, the most prominent groups were traders (64.4% of them gave this answer), and Confucians (55.6% of them gave this answer). The higher the economic status, the greater the proportion of this answer (Figure 6.8).

Debts

We asked the respondents whether they had incurred any debts, and if so, for what purposes. Nearly two out of every five respondents (39.3%) had outstanding debts. Those 883 respondents were asked additional questions for further analysis.

The meaning of debts is apparently quite different from the meaning of savings. People save when their income exceeds their expenses and only if they defer consumption by putting the surplus aside. Thus saving is a function of both adequate income and deferred gratification. As we have shown earlier,

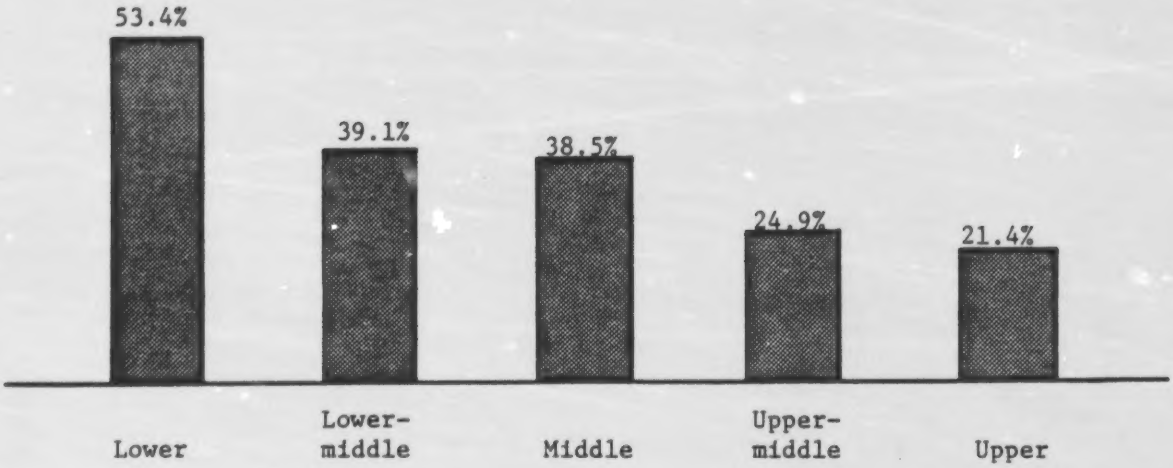


Figure 6.7 Percentage Who Would Use Rp100,000 for Home Improvements, by Economic Status

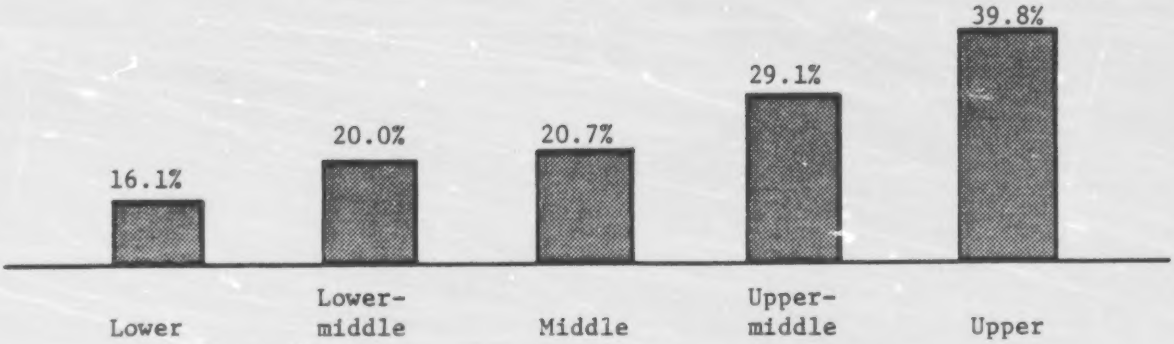


Figure 6.8 Percentage Who Wanted to Use Rp100,000 for Business Investment, by Economic Status

there are consistent patterns of respondents who saved regardless of the manner in which they handled their savings.

With regard to debts, we have found two entirely different dimensions: debts for consumption and debts for investment. More than half of those who borrowed (57.0%) did so out of necessity for daily expenses. Obligations for social, ceremonial, and religious functions accounted for another 7 percent borrowers. These are on the consumption side. On the other hand, more than one-fourth of borrowers (26.3%) took out loans for business purposes. Another 9.7 percent incurred debts for educational expenses. These are on the investment side.

Because of these two different uses, we did not find any clear pattern that matched people incurring debts with other demographic and media factors. However, when we analyzed the specific purposes for borrowing, the picture became clearer. Traders (84.0%) and Confucians (65.9%) were far more likely to borrow for business purposes than people in other occupations and other religious groups (Figures 6.9 and 6.10). The corresponding percentage was much higher among television viewers (50.6%) than among nonviewers of television (23.8%). These differences clearly stood out over and above other characteristics. The higher the economic status, the higher the percentage who borrowed money for business purposes (Figure 6.11).

In terms of borrowing for educational purposes, we found it was primarily those in the civil and military services (21.4%), readers of national newspapers (19.2%), everyday radio listeners (18.1%), magazine readers (16.4%), and Protestants and Catholics (16.2%) who did so more than others.

The number of respondents who borrowed for fulfilling social, ceremonial, and religious obligations was relatively small, a total of 62. Of those, 58 were males. An outstanding concentration were the 37 respondents who were Hindus and Buddhists. No other consistent characteristics were found.

As one would expect, borrowing money to meet living expenses was inversely related to economic status, from 87.8 percent among those at the lowest end of the economic scale, down to 26.2 percent among the upper strata (Figure 6.12).

Among those jobless who had to borrow, most (91.3%) did so to meet living expenses. Even in other occupational categories, this was a primary reason for borrowing money, as shown in Figure 6.13. Traders were the only occupational group with a low percentage.

Consistently, those with high media use (radio listeners, newspaper readers, magazine readers, and television viewers) had lower proportions of borrowing to meet living expenses (Figure 6.14).

Whether or not they had any outstanding debts, we asked the respondents whether they had ever borrowed money, and if so from what sources. Nearly nine out of ten respondents (88%) had borrowed money. The most frequently mentioned source of borrowing was family members (58%), followed by friends and neighbors (26.3%), village cooperatives or banks (7.3%), moneylenders or pawnshops (4.8%), and community organizations (3.6%). Our main interest was to see what kinds of people made use of public institutions, such as village cooperatives

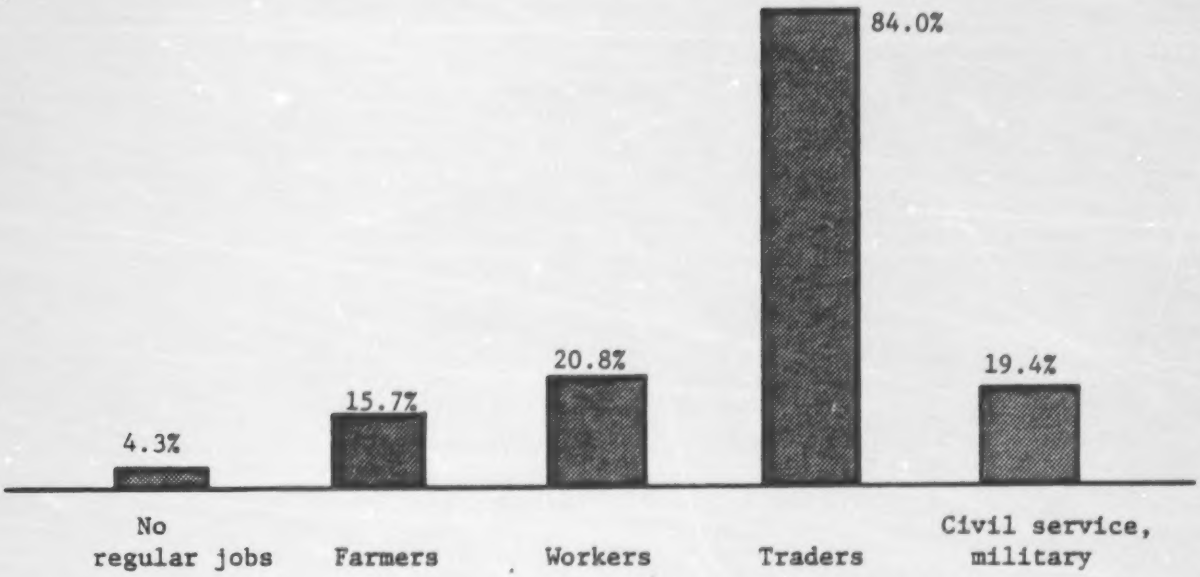


Figure 6.9. Percentage Having Debts for Business Investment, by Occupation

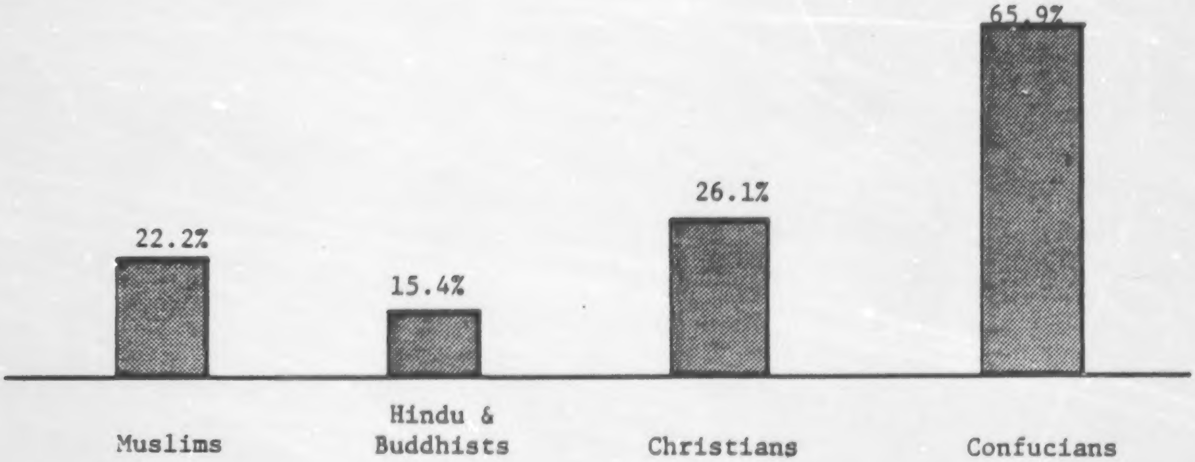


Figure 6.10. Percentage Having Debits for Business Investment, by Religion

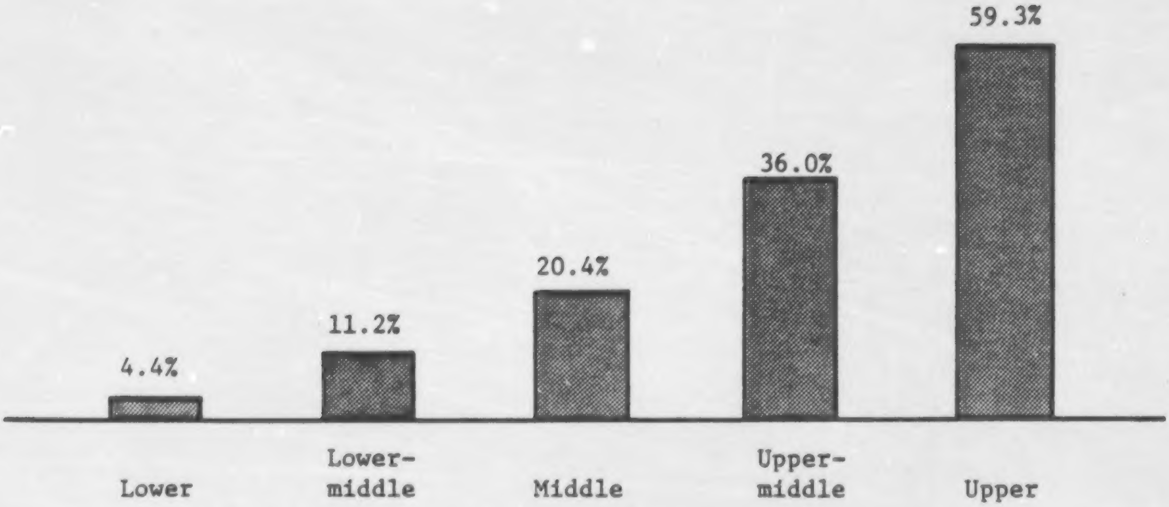


Figure 6.11. Percentage Having Debts for Business Investment, by Economic Status

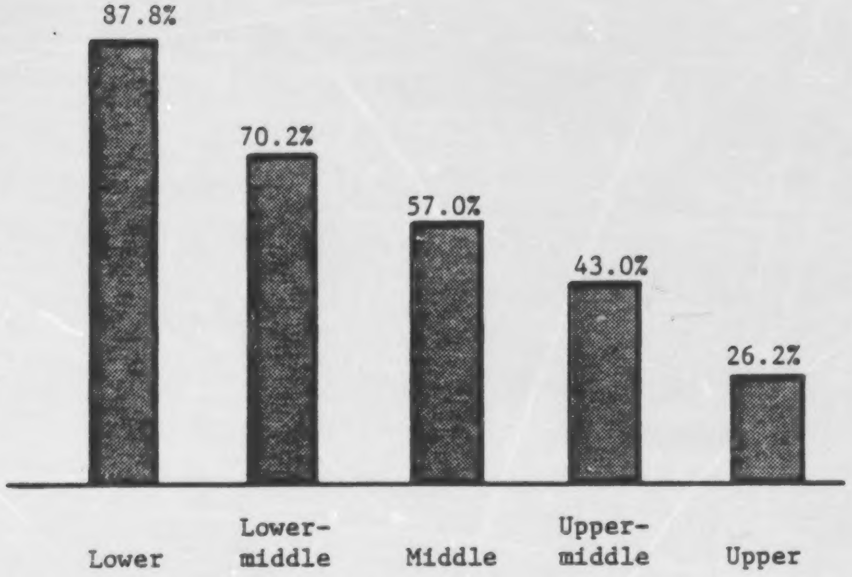


Figure 6.12. Percentage Borrowing Money to Meet Living Expenses, by Economic Status

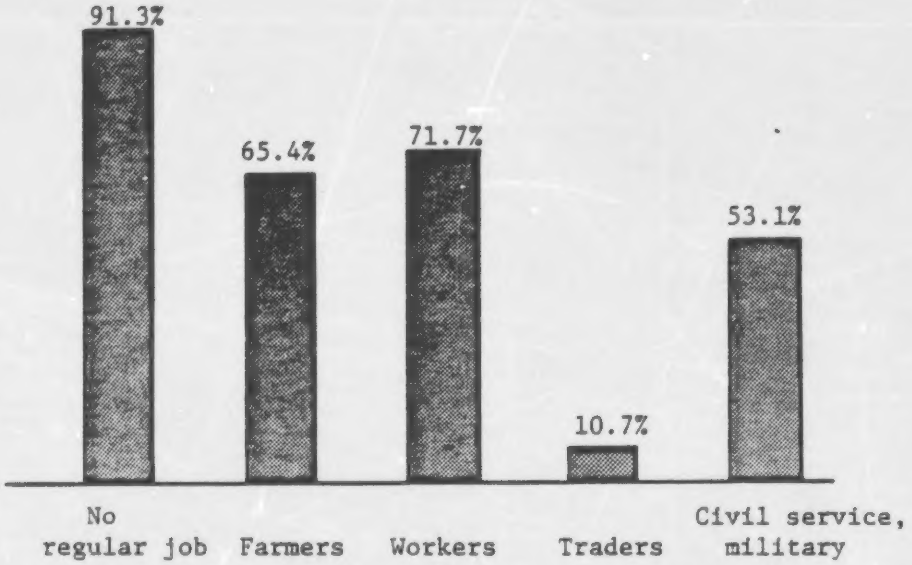


Figure 6.13. Percentage Borrowing Money to Meet Living Expenses, by Occupational Group

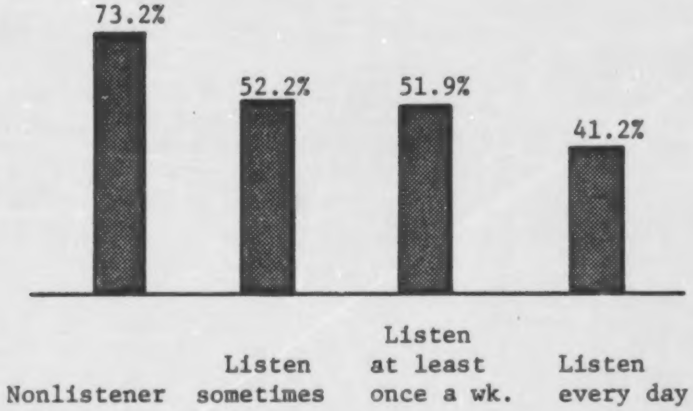


Figure 6.14a. Radio Listening

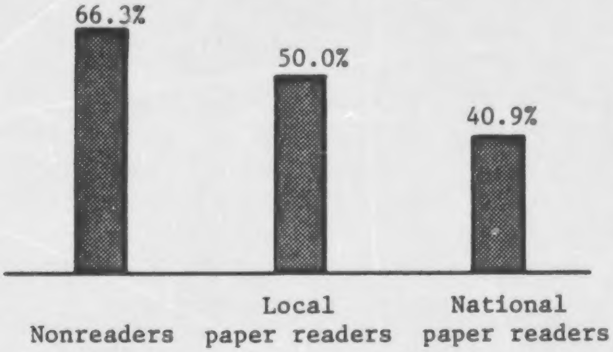


Figure 6.14b. Newspaper Reading

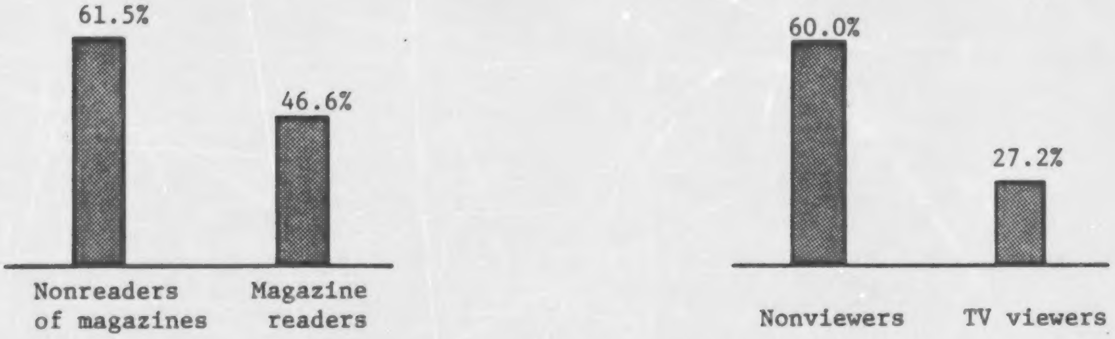


Figure 6.14c. Magazine Reading

Figure 6.14d. Television Viewing

Figure 6.14. Percentage Borrowing to Meet Living Expenses, by Media Use

or banks and community organizations. These two categories were combined for analysis.

We found that the most consistent indicators of those borrowing from public institutions were newspaper reading, magazine reading, and radio listening, but not television viewing, as shown in Figure 6.15. Those who read newspapers and magazines, and listened to radio had higher percentages of borrowing from public institutions. The difference between television viewers and nonviewers was minimal.

In terms of religious/ethnic groups, the Protestants and Catholics had the highest percentage of borrowers from public institutions (23.2%), followed by Hindus and Buddhists (14.3%), Confucians (8%), and Muslims (5.3%). The Confucians in this category were those who borrowed from village cooperatives and banks only. Confucians were the only religious/ethnic groups in the sample which did not have anyone using community organizations for the purpose of borrowing money.

Among the different occupational groups, traders had the highest percentage of borrowing from public institutions (15.9%), followed by those in civil or military services (14.2%), farmers (10.3%), and workers (4%). Of those who did not have regular jobs, nobody borrowed from these institutions.

On the whole, the higher the economic status, the higher the percentage of those who borrowed from public institutions (Figure 6.16).

Likewise, the percentages were higher among those with higher education, although the trend was not as consistent as with economic status (Figure 6.17).

Marketing

A majority of the people in rural Indonesia derive their income from agriculture, and this is reflected in our sample of which about two-thirds (1,449) were farmers. Their economic well-being generally depends on three major factors: the quantity of crops they produce, the production costs, and the amount of money they receive from the sales. The Indonesian government has been promoting various development programs to increase agricultural production and to reduce costs such as interest on production loans. But marketing is also important. Usually if a farmer directly markets his crops in a nearby town or city, he can get a better price by bypassing some of the middlemen. Thus we asked those respondents who identified their primary occupation as farmers whether they marketed their products in town.

Of the 1,449 farmers, only 16.6 percent engaged in marketing in town. Of the remaining farmers who gave a negative answer, most (60.4%) said they did not because they had little to sell. Another 13.1 percent sold their crops in village markets, while 8.2 percent had their products bought by wholesale dealers who came to the village. Others (1.7%) gave miscellaneous answers. We shall focus our analysis on those who marketed their products in town. Those who engaged wholesale dealers generally could move their products more efficiently than those selling retail in the village market. They will be analyzed too.

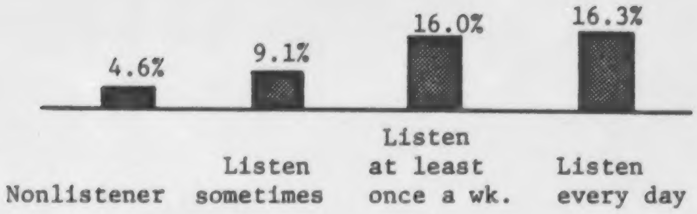


Figure 6.15a. Radio Listening

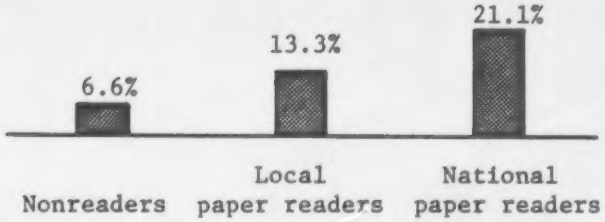


Figure 6.15b. Newspaper Reading

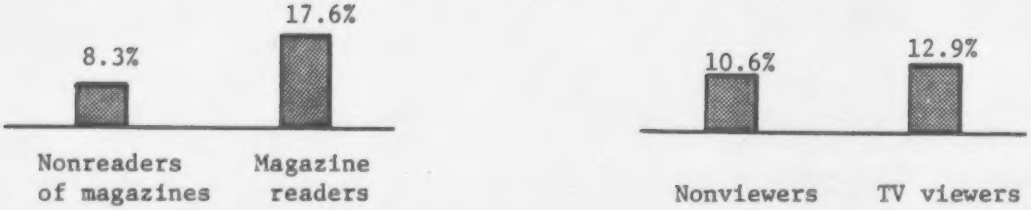


Figure 6.15c. Magazine Reading

Figure 6.15d. Television Viewing

Figure 6.15. Percentage Borrowing from Public Institutions, by Media Use

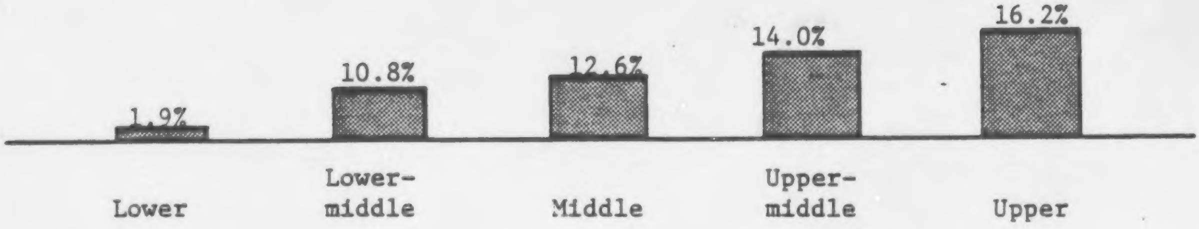


Figure 6.16. Percentage Borrowing from Public Institutions, by Economic Status

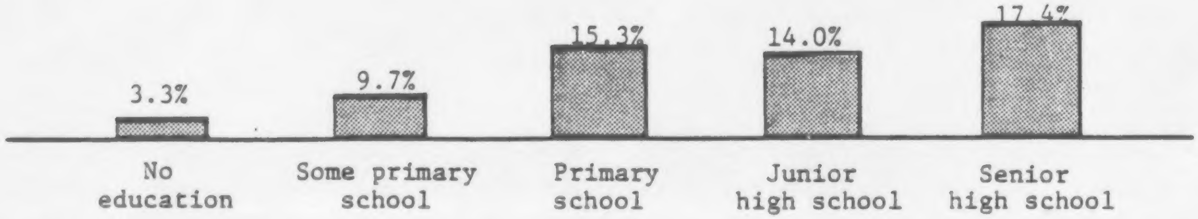


Figure 6.17. Percentage Borrowing from Public Institutions, by Education

Quite significantly, we found that the better educated, and those who were exposed to the mass media, particularly newspapers and magazines rather than radio and television, were the ones more likely to market their products in town and through wholesale dealers (Figures 6.18 and 6.19).

Another significant finding has to do with religious/ethnic backgrounds. The Protestants and Catholics as a group had the highest percentage of those who marketed in town. The Hindus and Buddhists, mostly in Bali, had the lowest percentage. The Muslims, who were the majority of the respondents, were in between. There were relatively few Confucians who were farmers. The Hindus and Buddhists relied on wholesale dealers more than other groups (Figure 6.20).

There is no clear pattern of relationship between economic status and use of market institutions. On the whole, those in the upper strata were somewhat more likely to market their products in town, while the middle stratum farmers were slightly more inclined to rely on wholesale dealers (Figure 6.21).

We did not find any consistent relationships between marketing practices and sex and age.

Our general impression is that effective use of market institutions, such as direct marketing in town or transactions through wholesale dealers, is closely related to newspaper and magazine reading. The relationship with education was consistent, but somewhat less pronounced. Our interpretation is that the print media contain useful information about the market outside the village and help farmers to use the external market institutions more extensively.

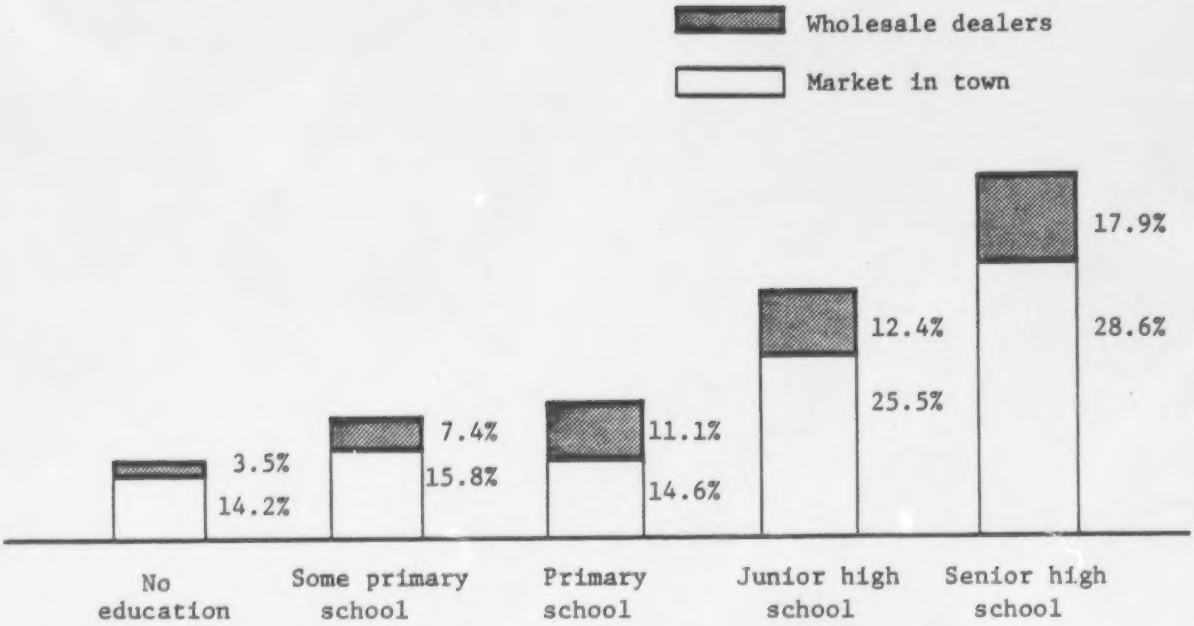


Figure 6.18. Percentage of Farmers Marketing Their Products in Town and Through Wholesale Dealers, by Education

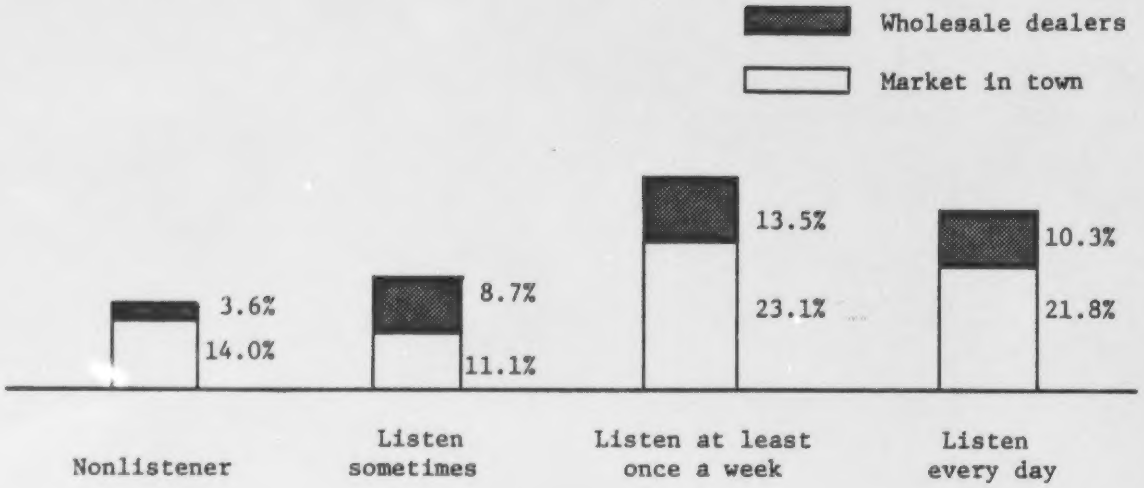


Figure 6.19a. Radio Listening

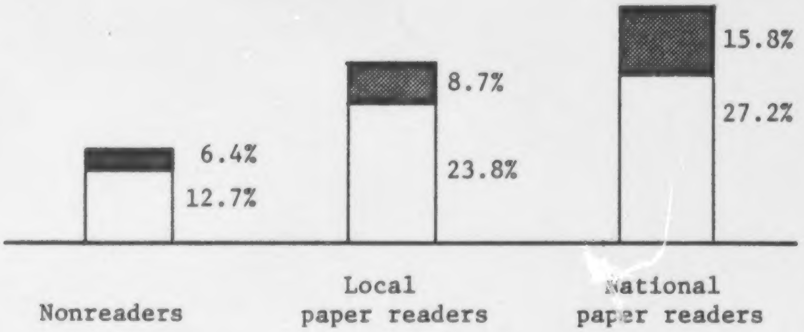


Figure 6.19b. Newspaper Reading

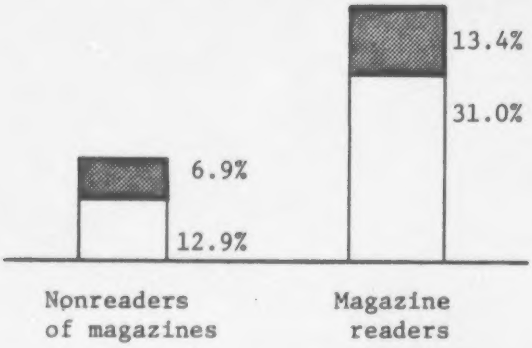


Figure 6.19c. Magazine Reading

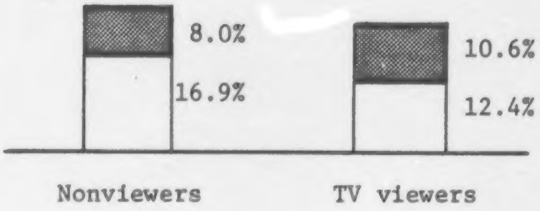


Figure 6.19d. Television Viewing

Figure 6.19. Percentage of Farmers Marketing Their Products in Town and Through Wholesale Dealers, by Media Use

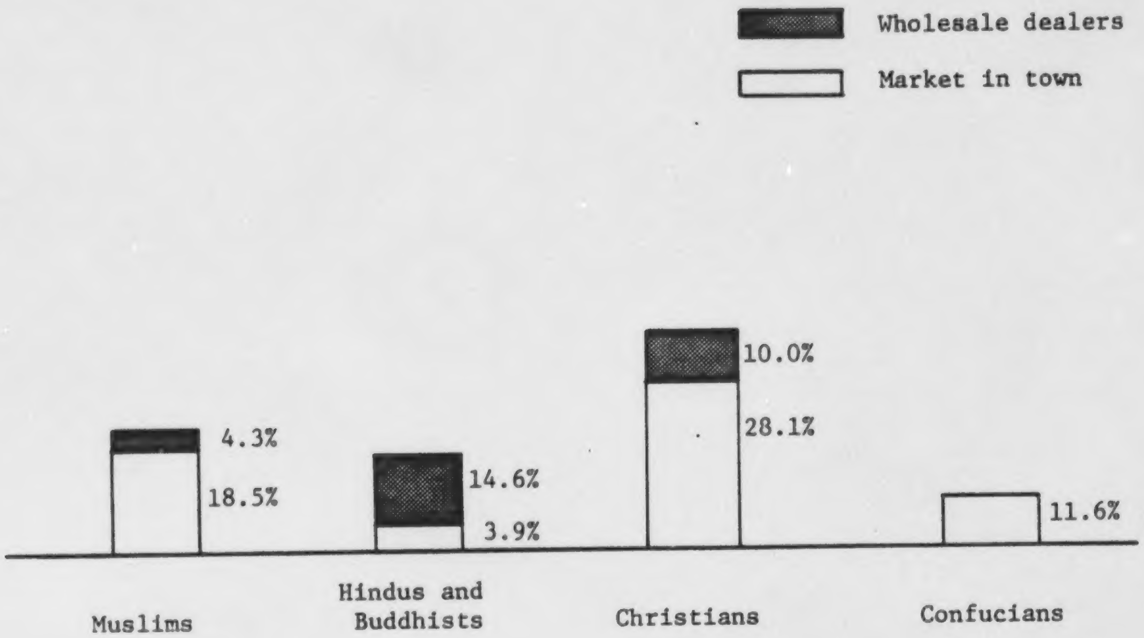


Figure 6.20. Percentage of Farmers Marketing Their Products in Town and Through Wholesale Dealers, by Religion

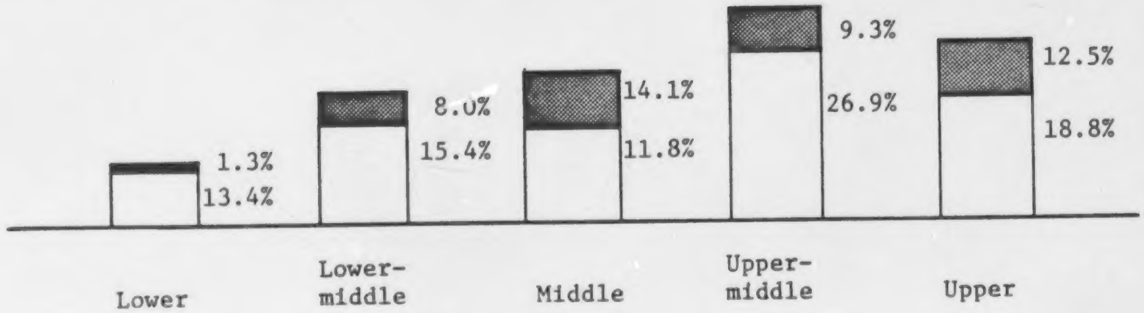


Figure 6.21. Percentage of Farmers Marketing Their Products in Town and Through Wholesale Dealers, by Economic Status

Summary

Highly consistent trends indicate that those who listened to radio, read newspapers, and read magazines were able to make more efficient use of their financial resources. Education, and to some extent economic status, were also related to the use of financial resources, but the relationships were not as pronounced and consistent as those involving exposure to mass media.

We found that those who were exposed to the media, who were better educated, and were of higher economic status were more likely to be the ones who had savings. But even more significant, among the savers, those who used the media more and those who were better educated were more likely to use their savings as capital for investment, rather than keeping their savings immobilized in, for instance, jewelry.

It was also the better educated and those who used the media more—in this case, the print media rather than the broadcasting media—who were able to make more efficient use of the marketing institutions for selling their crops.

About two out of five respondents had outstanding debts for a variety of reasons, ranging from meeting daily expenses to fulfilling social or religious obligations to business investment. The traders and the Confucians, who were mostly traders, had the highest percentages of borrowing for business investment, as one would expect. A significant finding is that the radio listeners, newspaper readers, and magazine readers were most likely to incur debts for educational purposes.

Chapter 7: AGRICULTURE AND ADOPTION OF NEW FARMING PRACTICES

Two elements stand out dramatically from the answers to the questions on agriculture. One is the very high proportion of persons who had already used the new practices inquired about. The other is the close relationship between mass media use and knowing about and using the new practices. There are other correlations, but this one is important both because the relationship is so close, and because of its implications for pushing ahead with the rural development program.

The Number of Users

We asked those respondents who were farmers about four agricultural practices related to greater food productivity and rural development in general: the use of high-yielding rice, chemical fertilizer, pesticides, and intensive planting. The lowest proportion of users, among the farmers in our sample, for any of these practices was 63.6 percent. The highest was 78 percent, and the average, over 70 percent. An additional 8 percent, on the average, said they had not yet used the stated practice, but intended to do so in the future.

Figure 7.1 shows how much the four practices were being used.

The importance of these percentages, of course, is that new agricultural practices had already penetrated to a considerable proportion of the farms and farmers in these five regions of Indonesia. If an average of 70 percent were using the practices at that time, and another 8 percent intended to use them, the number who _knew_ of the practices must already be near 100 percent. How much of this knowledge had been gained from the media, how much from extension services, and how much from personal observation and conversation, we do not know, but it is obvious that the chief function of television when it becomes available, will no longer be to acquaint viewers with "modern" practices, but rather to explain, demonstrate, and perhaps persuade.

We can make some guesses as to how this information reached the farmers and why the nonadopters had not adopted the new practices by analyzing other returns from the survey. And let us begin by reviewing what we know about mass media use as related to adoption or nonadoption.

Agriculture and the Mass Media

As suggested earlier, there is a close and consistent relationship between amount of use of radio, newspapers, and magazines, and the adoption of new agricultural practices. There is a similar relationship with television, although we are not going to report it here because of the very small number of television receivers in use at the time of this study. The following is, therefore, limited to a comparison between listeners and nonlisteners to radio, and readers and nonreaders of newspapers and magazines in terms of the proportions of each who had adopted the new practices.

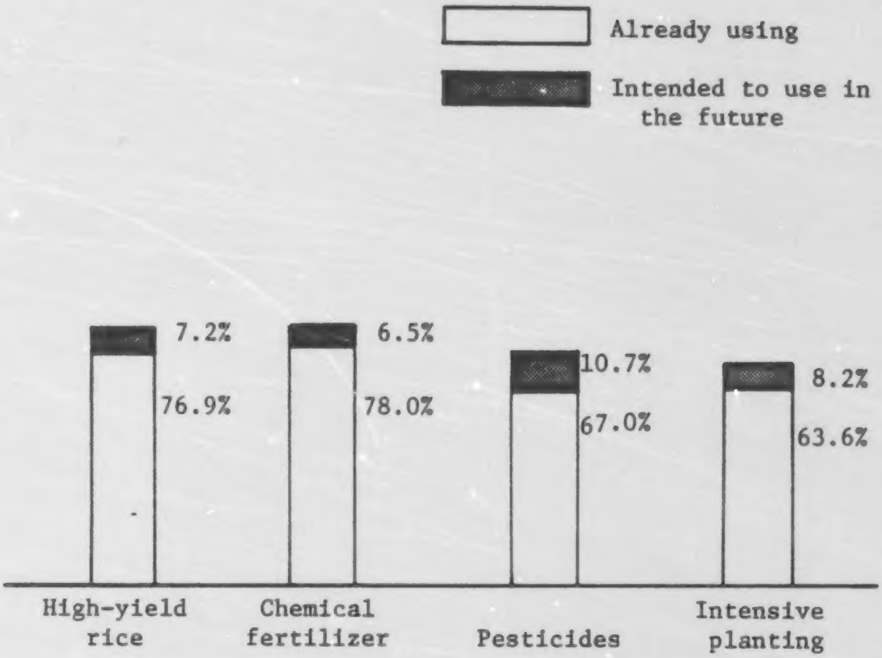


Figure 7.1. Use of Four Agricultural Practices

In all twelve of these comparisons, media users adopted the new practices in significantly larger proportions than nonusers. In the case of radio, we can make a comparison by *amount* of use, as shown in Table 7.1 and Figure 7.2.

Table 7.1

Correlation between Adoption
of Four Agricultural Practices and Media Use

	Proportion Who Have Adopted (%)			
Media Use	High-yield Rice	Chemical Fertilizer	Pesticides	Intensive Planting
Radio				
Nonlisteners	72.3	71.0	60.6	49.4
Listen every day	84.5	86.9	77.7	75.2
Newspapers				
Nonreaders	76.1	76.1	64.2	59.9
Readers	82.4	85.4	72.8	74.6
Magazines				
Nonreaders	75.9	76.9	64.8	60.4
Readers	79.9	81.5	73.8	73.1

These curves rise at an extraordinarily consistent rate. Looking at them, it is hard indeed to say that the amount of use of the media had nothing to do with adoption of new practices. The very large differential between the proportion of everyday listeners and of nonlisteners who had adopted intensive planting is particularly persuasive.

Exactly what impact media exposure had on the adoption process, we do not know, but these figures leave us very little reason to say that it has played *no* part, and experience elsewhere leads us to expect that other elements—interpersonal communication, availability of guidance and materials, and ability to pay the necessary costs, among other things—also played a part in the decision to adopt. Let us therefore look at some of the other probable correlates.

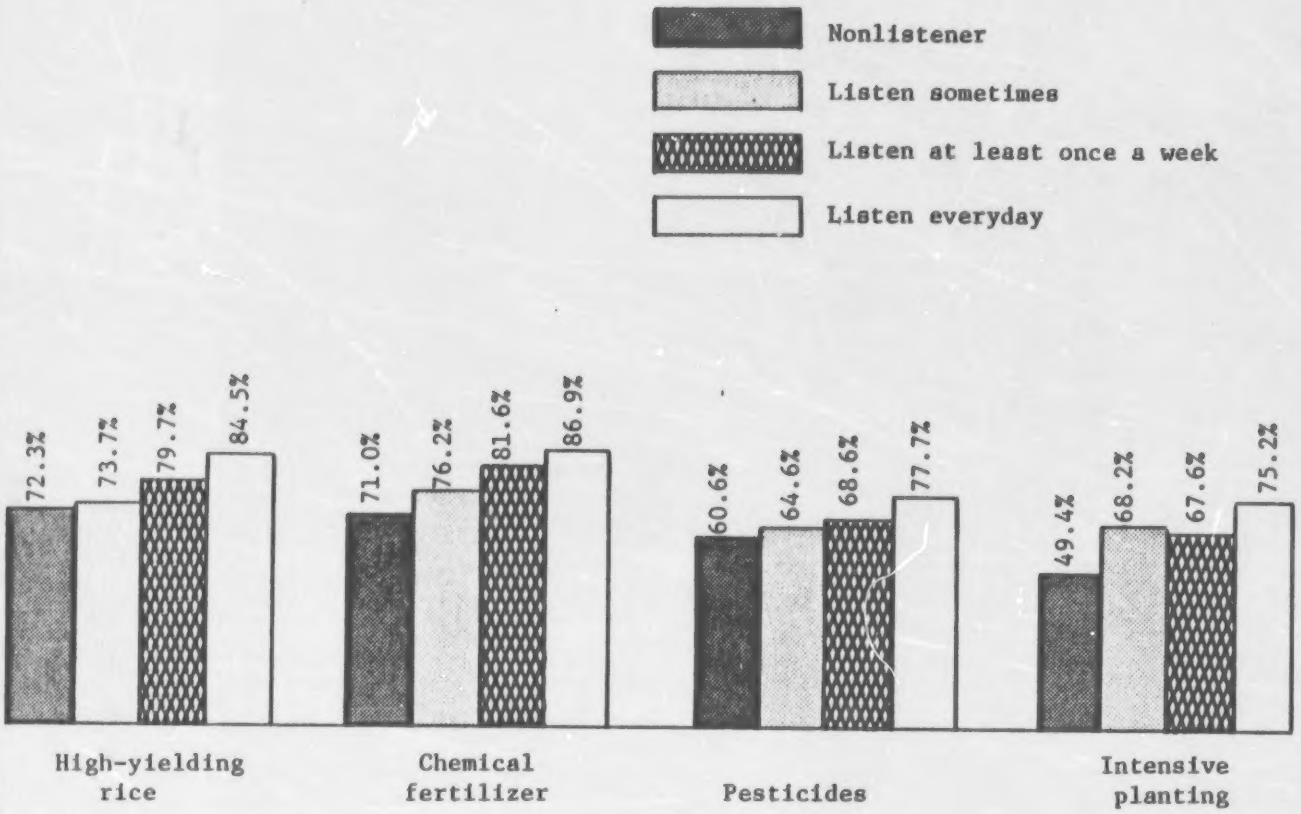


Figure 7.2. Correlation between Use of Four Agricultural Practices and Radio Listening

Economic Status and Adoption

It will come as no surprise to learn that a farmer's ability to meet the initial cost of new methods and materials has something to do with the likelihood of adopting them. There is an average difference of about 25 percent between the proportion of the lower economic class and the proportion of the upper economic class who chose to adopt. However, let us not compare these classes, which are the most different, but rather compare adoption in the lower with that in the middle class (Figure 7.3). In a sense this is more meaningful than a comparison between the lowest and the highest groups would be, because it indicates that a farmer must have at least a minimum level of financial resources before he dares risk undertaking one of these new practices, even with government help available to him.

Education and Adoption of New Practices

Does education have anything to do with the likelihood that a farmer will adopt a new agricultural practice? Less, perhaps, than might be expected. There were slight differences by education in the proportion of adopters of high-yielding rice and chemical fertilizers, but the differences were so small that they appear to have very little to do with the total result. In the case of pesticides, however, education did make a small but significant difference. Here, as in the other cases, persons with no education were least likely, and highly educated persons most likely to adopt. But the most convincing results of education come from the figures on intensive planting. This is the most recently introduced of the four innovations and perhaps the one that least resembles previous practices. It may be, therefore, that new and unfamiliar practices are most likely to be accepted first by well-educated persons. Table 7.2 shows the proportion of adopters of intensive planting by their levels of education.

Table 7.2

Adoption of Intensive Planting, by Education

Education	Adopters (%)
No education	50.8
Some primary school	61.0
Primary school	71.8
Junior high school	72.0
At least senior high school	75.0

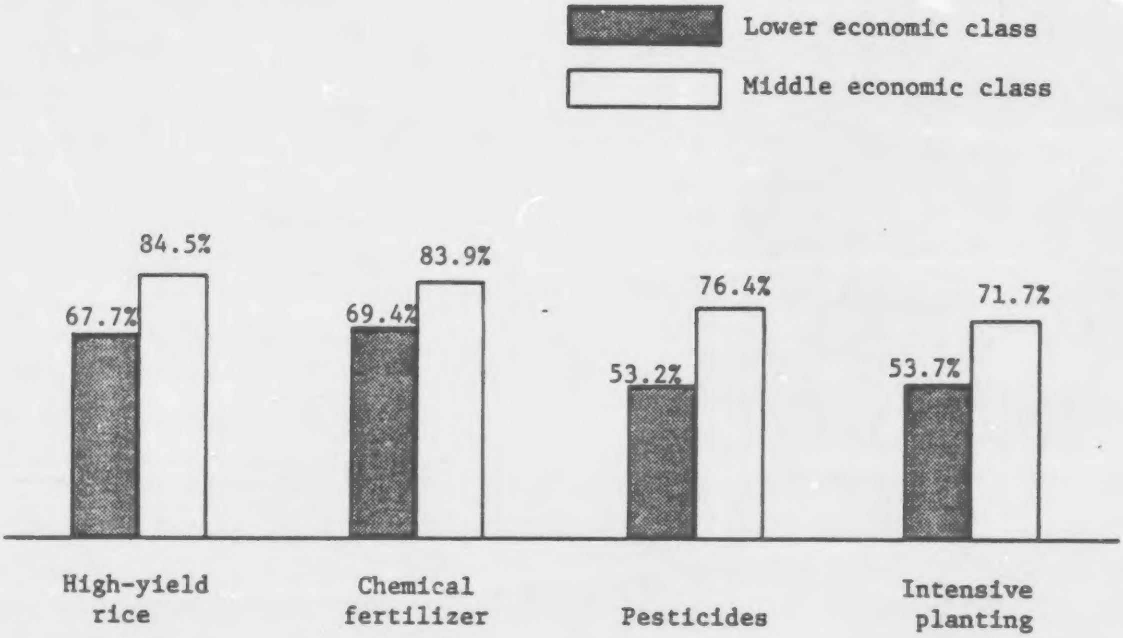


Figure 7.3. Adoption of Four Agricultural Practices, by Economic Status.

Religion and the Adoption of New Practices

In general, Hindu and Buddhist farmers in Bali, where village organizations are traditionally strong, were the most likely to adopt these new methods. This trend is remarkably consistent. Except in the case of pesticides, the largest proportion of adopters of each agricultural innovation always came from the Hindus and Buddhists. In the case of the one exception—Muslims were most likely to adopt pesticides—the Hindus and Buddhists were in second place. In the case of two innovations, high-yield rice and pesticides, Christians had the lowest proportion of adopters; in the other two, fertilizer and intensive planting, Confucians had the lowest. Yet even in these two groups, there are a few interesting exceptions. The use of high-yielding rice, for example, was adopted by 77.6 percent of the Confucians, and intensive planting by 65.7 percent of Christian farmers (second ranking among the religious groups). See Table 7.3.

Table 7.3

Adoption of Four Agricultural Practices
by Farmers in Four Religious Groups (%)

Religion	High-yield Rice	Chemical Fertilizer	Pesticides	Intensive Planting
Hinduism-Buddhism	87.5	91.2	71.9	83.9
Islam	80.7	79.8	77.6	54.8
Confucianism	77.6	58.6	53.4	39.7
Christianity	57.9	63.7	41.3	65.7

Other Relationships with Adoption

Other correlates are few, and the relationships generally small. Inasmuch as this question was asked only of farmers, we could not expect any difference by occupation. Age and sex showed inconsistent relationships. Really, therefore, the only consistently significant relationships with adoption proved to be media use, religion, and economic status.

Their Ideas of the Rural Development Program

Although the questions about adoption were asked only of the farmers in our sample, we asked the entire sample what they considered the benefits of BIMAS (the rural development program) to be.

Some of the results were easily predictable. More farmers than members of other occupational groups had answers, and more men than women--doubtless because of the division of responsibility in the Indonesian family. It could also have been predicted that the younger people in the sample would be more likely than the older people to have an answer to such a question, although this difference was slight. Even the answer most often given could have been predicted: that the chief benefit of the rural development program was to increase the farm product. That answer was given by 72.7 percent of all respondents. Other answers were few in number: destruction of insects (1.6%); preservation of the land through fertilization (3.7%); and miscellaneous replies (1.8%). More significant was the fact that 20.2 percent of the sample had no answer at all: they did not know what were the intended benefits of the rural development program.

Who were these persons unable to cite a benefit for BIMAS? Among the religious groups, 56.7 percent of Confucians gave no answer. This is not wholly surprising inasmuch as the majority of this group tends to be in trade rather than farming. Among educational groups, 36.1 percent of those with no education said "don't know." More older people (26.1%), as compared with the 15-29 year age group (15.7%), could not answer the question. Among the economic groups, it seems peculiar at first that both the lowest (28.8%) and the highest (24.0%) were less likely than the middle economic group to have an answer to this question. However, the persons in the highest economic group would be more likely to be in government service or trade than in farming, and the lowest group would include the unemployed and the uneducated, so that this finding is not without explanation.

Beyond the obvious characteristics of occupation (farmer) and sex (male), the subgroups of the sample that correlated most highly with ability to answer the question about benefit of rural development were educational. Knowledge of BIMAS rose steadily with amount of education, as shown in Figure 7.4. The percentages are proportions of each group able to give a reasonable answer to the question.

Differences by religion were much like those revealed by the questions on adoption. Eighty-eight percent of the Buddhists and Hindus (who were also the most frequent adopters) could give a satisfactory answer, as compared to 82.8 percent of the Christians, 80.8 percent of the Muslims, and 43.3 percent of the Confucians.

But the correlations with media use were even closer than with education. The more a person listened to radio, the more kinds of newspapers he read, and whether or not he read magazines, all related consistently to ability to give a satisfactory explanation of the benefits of rural development. Table 7.4 gives the proportions of persons able to give satisfactory answers to the question about the benefits of BIMAS.

Looking at those figures, it is very hard to believe that media use has nothing to do with how well people understand the rural development program.

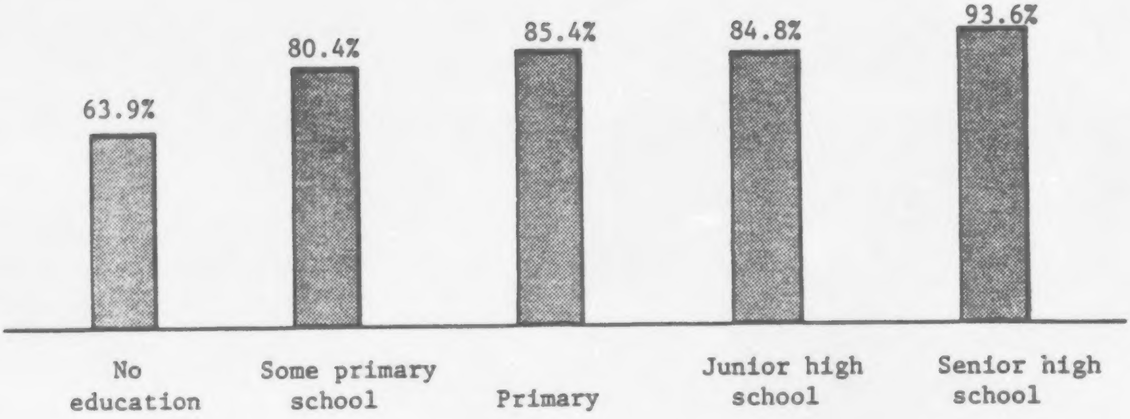


Figure 7.4. Correlation between Education and Knowledge of BIMAS.

Table 7.4

Correlation between Media Use and Knowledge of BIMAS

Media Use	Proportions Answering Correctly (%)
Radio	
Nonlisteners	68.9
Listen sometimes	82.1
Once a week	83.9
Every day	87.8
Newspapers	
Nonreaders	75.3
Read local newspaper	84.3
Read national newspaper	89.1
Magazines	
Nonreaders	76.0
Readers	90.2

Summary

More than 70 percent of the farmers in the sample were already using the four new agricultural practices asked about in this study. Seventy-eight percent had adopted the use of chemical fertilizer, 76.9 percent were planting high-yielding rice, 67 percent were employing pesticides, and 63.3 percent were using intensive planting. On the average, an additional 8 percent said they intended to adopt each of these practices. Therefore, the number who knew about these innovations must have been very high indeed.

Mass media use was the closest correlate to adoption of new practices in agriculture. Users of radio, newspapers, and magazines had adopted every one of these practices in significantly higher proportions than the nonusers, and whenever it was possible (as it was, for example, with radio) to estimate the amount of media use, that also was closely and consistently related to the likelihood of adoption. The more use of media, the more adoptions.

Economic status also was related to the likelihood of adopting one or more of the innovations. A certain degree of ability to pay the additional costs and to take the risk of farming in a new way seems to be a prerequisite for adoption. The relation of education to adoption appears to be consistent but slight, except in the case of intensive planting, where the more highly educated persons were distinctly more likely to adopt this practice. One of the most consistent relationships was religion. Hindus and Buddhists tended to furnish the highest proportion of adopters, with the Muslims a close second. Christians and Confucians were least likely to adopt.

Questions about adoption were asked only of farmers. The entire sample, however, was asked about their ideas about the rural development program--what they thought were the chief benefits of BIMAS. About 80 percent were able to give satisfactory answers; 72.7 percent said the program was to increase the farm product. About 20 percent of the sample, however, did not know what the rural program was expected to do.

Who did and who did not know about BIMAS? Farmers, of course, were more likely than members of other occupations to be knowledgeable about this; men, more than women; younger age groups rather than older ones. Knowledge went up with education. However, in this case as with the questions about adoption, mass media use seemed to be closely related to knowedge of the rural program. The more likely a member of the sample was to listen to radio and read newspapers and magazines, the more likely he or she was to know about BIMAS.

Chapter 8: HEALTH AND FAMILY PLANNING

Within the very large field of health behavior, we tried to find out, first, where different people and groups go for medical care; second, whether they use such preventive medicine practices as vaccination and boiling water; and third, how many of them know about, and how many make use of, contraceptive practices.

Where Do They Go for Help When Members of the Family are Ill?

About seven out of eight persons in our sample, when they had urgent need of medical care, either called upon a physician or went to a health center (where the care was less likely to be given by a trained physician). About 10 percent went to see a medicine man, and 3 percent preferred to treat the patient without help from the outside (Figure 8.1).

As we might expect, economic status and education have a great deal to do with what kind of care people seek. Persons in the highest economic brackets, those holding the most remunerative jobs (such as government service or trade), and those who are highly educated were most likely to go to a doctor. The health center tended to be patronized by those who were somewhat less affluent, and who had, on the average, a little less education. The medicine man's clients tended to be in the low economic brackets, and those with no education. Farmers and workers were more likely than traders or government servants to go to him. What families treated their own ill members? The unemployed, the uneducated, and those at the bottom of the economic ladder, in other words, those who cannot afford to go outside for help. See Figure 8.2.

The pattern was almost exactly the same by educational level. Occupations show much the same relationships in descending order from government service, through trade, farmers, and workers to unemployed.

There were also some other differences worth mentioning. Women were a bit more likely than men to use a doctor (59.7% as against 53%), whereas men were more likely than women to go to the health center (46.8% to 35.4%). Religion also provided significant differences. Christians were most likely to see a doctor (77.2%), followed in order by Confucians, Muslims, and Hindus-Buddhists (46.8%, 35.0%, and 27.6%, respectively). Hindus and Buddhists, on the other hand, were the most frequent users of the health center (59.2%), with Muslims, Confucians, and Christians next in order (49.6%, 38.6%, and 19.2%) Almost no Christians used the medicine man (0.2%), while about 12 percent of Confucians, Muslims, and Hindus and Buddhists all used him.

Finally, it is worth noting that the more radio listening, newspaper and magazine reading a person did, the more likely he or she was to go to a physician for medical care. Persons who did not listen to radio and did not read a newspaper or magazine were the ones most likely to go to a medicine man or to treat their sick at home. This difference doubtless arises as much from economics as from media use. That is to say, ability to pay helps to determine both the kind of media and the health care a family can afford.

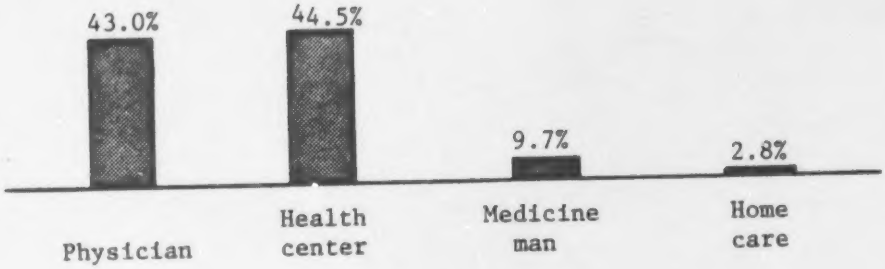


Figure 8.1. Where People Go for Urgent Medical Care

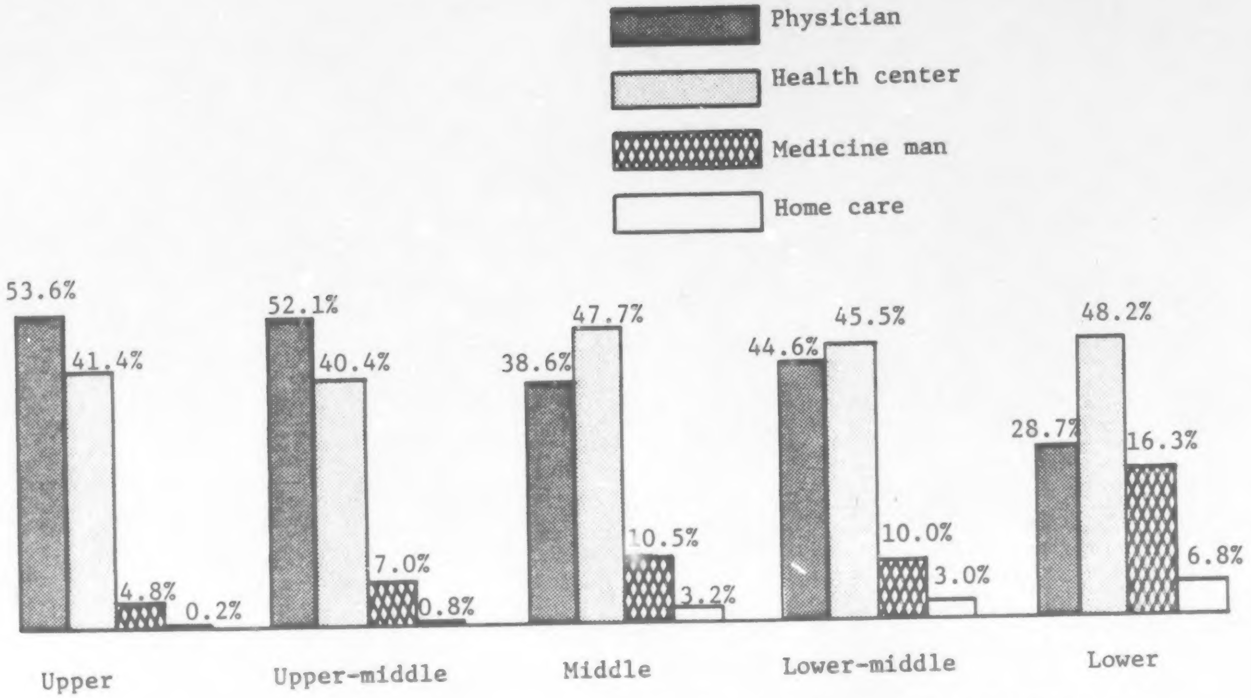


Figure 8.2. Type of Urgent Medical Care, by Economic Status

Who Aids in Childbirth?

This type of medical aid follows a pattern very much like the one just described. Overall, just under half of the families in our sample said they sought professional care in childbirth. Just as 43 percent reported going to a doctor in case of illness, 46.5 percent reported going to a professionally trained person—a physician or a registered midwife—for help in time of childbirth. Almost the same number—44.1 percent—said they used an unregistered midwife, that is, one who had her training in practical experience. The health clinic was chosen by 5.8 percent of the sample, and 3.6 percent gave "other" answers, including dependence on a member of the family to supervise the delivery.

Economic status, occupation, education, media use, and religion were instrumental in determining which families used professional care, as we have seen them to be in the case of illness. High economic status, high-paying occupations (government service and trade, for example), education at least through high school, and above-average amounts of listening to radio, reading newspapers and magazines, but not television viewing, characterize approximately half of the sample that called in a doctor or a registered midwife to help with childbirth. The percentages of those who sought professional care in childbirth were, from the lower economic group to the upper economic group: 33.6 percent, 43.6 percent, 34.0 percent, 54.6 percent and 67.1 percent. The corresponding percentages rose with education: no education (31.3%), some primary school (43.8%), primary school graduates (47.4%), junior high school (58.2%), and senior high school or college (74.6%). Similar results were found with occupations (Figure 8.3).

The differences by media use were just as clear (Table 8.1).

Whereas among religious groups it was the Christians who were most likely to go to a doctor in case of illness, the Confucians were most likely to use professional care in childbirth. The Protestants and Catholics are close behind, but Hindus and Buddhists and adherents of Islam are more likely to call in the unregistered midwife (Table 8.2).

Do They Boil Drinking Water?

No fewer than 92 percent of our sample reported that they regularly boil water for drinking. Given that much agreement, we can hardly expect many significant differences from related variables.

Actually only two characteristics of these persons seemed to make a significant difference in whether or not they boiled their drinking water. There is a steady rise by amount of education (Figure 8.4).

The other variable that made a significant difference was religion, and only one religion contributes noticeably to it. Whereas Confucians, Christians, and Muslims all say, in proportions ranging from 94.8 to 99.3 percent, that they boil drinking water, only 76.8 percent of the Hindus and Buddhists do so. This is more than 20 percent below the average of the other religious groups.

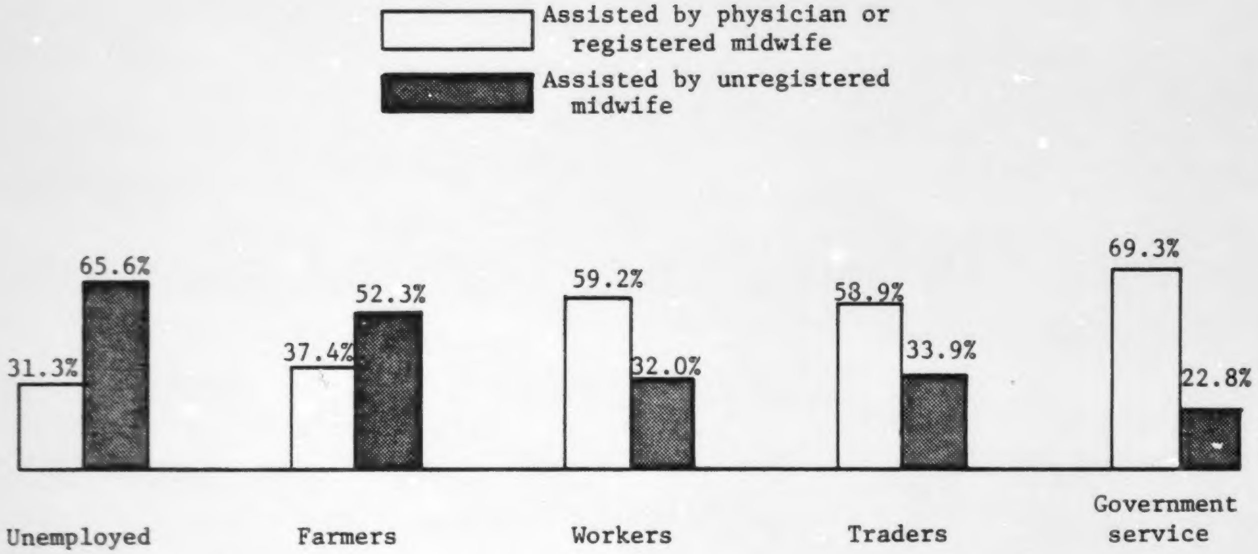


Figure 8.3. Assistance in Childbirth, by Occupations

Table 8.1

Assistance in Childbirth, by Media Use (%)

	Doctor or Registered Midwife	Unregistered Midwife
Radio		
Nonlisteners	33.7	57.7
Everyday listeners	55.8	31.9
Newspaper		
Nonreaders	35.2	53.6
Local paper readers	60.8	34.4
National paper readers	66.4	25.2
Magazine		
Non-readers	39.4	50.2
Readers	66.1	27.2

Table 8.2

Assistance in Childbirth, by Religion (%)

Religion	Doctor or Registered Midwife	Unregistered Midwife
Confucianism	78.4	18.5
Christianity	70.5	23.7
Hinduism-Buddhism	39.3	43.5
Islam	34.8	56.6

Vaccination

All the persons in the sample were asked two questions about three kinds of vaccination—smallpox, typhus, and tuberculosis: Has anyone in your family been vaccinated in the last six months? Ever been vaccinated? Therefore, the results do not tell us what proportion of the people in the sample had been vaccinated, but only the proportion of families of which one or more members families had been vaccinated. Table 8.3 summarizes the results.

Table 8.3

Families with at Least One Vaccinated Member (%)

Vaccination	Within Last 6 Months	Some Time in the Past	Never
Smallpox	54.1	41.1	4.8
Typhus	54.2	40.9	4.9
Tuberculosis	30.8	53.7	15.5

Perhaps the most important of those figures is the "Never" column, which indicates that less than 5 percent of the 2,245 families who responded to this question had never been touched by a smallpox or typhus vaccination, and that a little over 15 percent had never had any member vaccinated for tuberculosis. Let us repeat that this does not mean that less than 5 percent of the total population represented by the sample had never been vaccinated. That proportion may be much larger.

Analysis (using multiple regression) showed that only two characteristics of the sample made any significant contribution to this result. The ability to pay, that is, economic status, helped to determine what families had smallpox and typhus vaccinations, and religion was a significant determinant for all three kinds. The economic trend line was a bit clearer for typhus than for smallpox, as Figure 8.5 shows.

Examination of the responses by religions showed that Hindus and Buddhists are the most frequent users of two kinds of vaccination, and a close second in use of the other. Table 8.4 shows the results divided by religions. The figures are proportions of families in which someone had been vaccinated during the last six months.

100

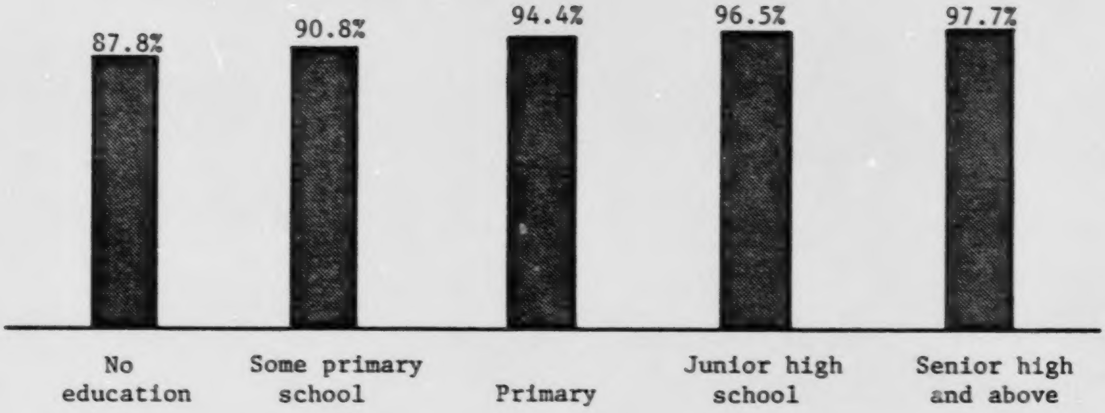


Figure 8.4. Percentage Boiling Drinking Water, by Education

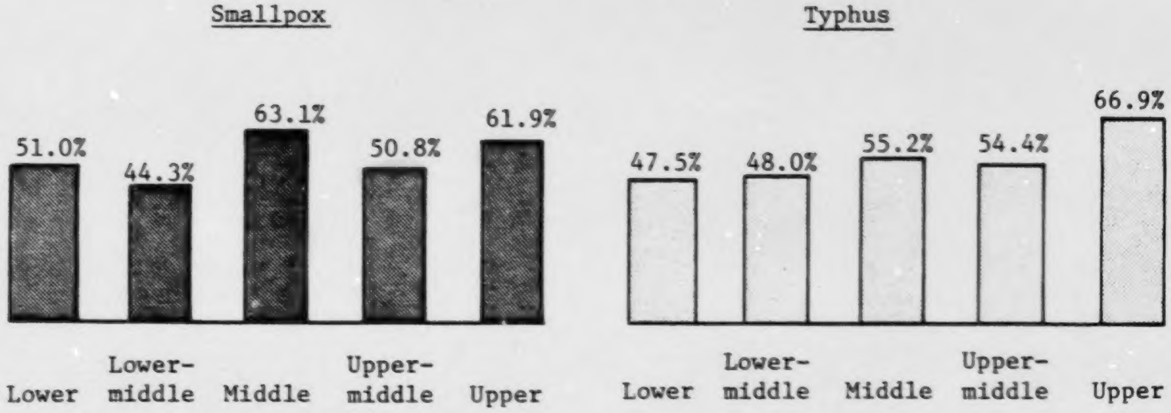


Figure 8.5. Proportion of Families in Which Someone Had Been Vaccinated in Last Six Months

Table 8.4

Families in Which Someone Had Been Vaccinated in the Last Six Months, by Religion

Vaccination/Religion	%
Smallpox	
Hinduism-Buddhism	74.5
Confucianism	59.6
Islam	49.8
Christianity	42.7
Typhus	
Confucianism	64.3
Hinduism-Buddhism	61.4
Christianity	52.0
Islam	50.9
Tuberculosis	
Hinduism-Buddhism	56.6
Christianity	44.9
Islam	19.2
Confucianism	2.9

Some of these differences are striking indeed, for example the disparity between the amount of use Confucians made of tuberculosis vaccine and of the other kinds, and also the relatively high use by Hindus and Buddhists. We are not prepared to explain them.

Other differences were small and, for the most part, the trend lines were not steady. A few are worth noting, however. In the case of typhus and tuberculosis vaccine, both radio listening and newspaper and magazine reading seemed to correlate with more use of vaccination. In the case of smallpox vaccination, there were no such clear media differences. The unemployed typically took less advantage of vaccination, as of other opportunities for preventive medicine. There seemed to be some relation to education, but the trend was not clear. Only in the case of economics and religion was there a clear and consistent relationship, throughout the sample, to the amount of vaccination.

Contraceptive Methods

Respondents were asked whether they had ever heard of and whether they had ever used four contraceptive methods: sterilization (both men and women), the pill (women only), the I.U.D. (women only), and condoms (men only). The most striking result of these questions is the great difference between the large proportion who had heard of and the very small proportion who had used these methods. On the average, each of these methods was known to more than 60 percent of the respondents, yet the proportion of users, overall, was less than 5 percent. The results are summarized in Table 8.5.

Table 8.5

Awareness and Use of Four Contraceptive Methods (%)

Contraceptive	Heard of	Used
Sterilization	56.3	1.6
Pill (females only)	61.9	5.0
IUD (females only)	56.6	11.3
Condom (males only)	72.4	3.3

The pattern of correlations with knowledge and use of contraception is surprisingly similar for all the four methods. In each case, more education, higher economic status, and more media use characterized persons who had heard of the methods, and more media use also went with use of two of the methods—the pill and the condom. Muslims and Confucians had less awareness and use of all of the contraceptive methods. Let us look at the results on each of the methods separately.

Sterilization

As we have said, 56 percent of the total sample had heard of sterilization, and less than 2 percent had made use of it. Regression analysis showed that five characteristics—education, economic status, radio listening, affiliation with Islam and Confucianism—all made significant differences in whether an individual had heard of the practice, and that affiliation with Islam and Confucianism both made significant differences in whether the person had undergone sterilization. Figure 8.6 shows the differences in education and economic status in the proportions of persons who had heard of sterilization.

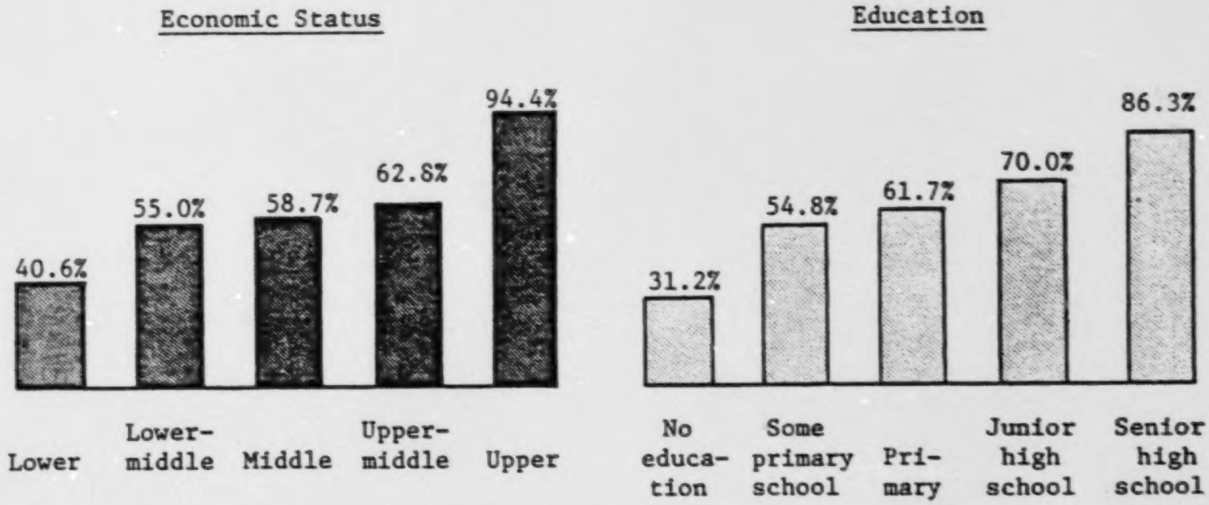


Figure 8.6. Knowledge of Sterilization, by Economic Status and Education

Knowledge of contraception increased sharply with the amount of radio listening. Only 35.8 percent of nonlisteners had heard of sterilization, whereas 70.1 percent of everyday listeners had heard of it. Persons who listened only once a week were also substantially above nonlisteners in knowledge of the method (62.6%). Newspaper and magazine readers were also substantially better informed on the method than were nonreaders.

Only 31.6 percent of Confucians and 46.4 percent of Muslims had heard of sterilization, as compared to 69.2 percent of Hindus and Buddhists and 76.9 percent of Christians.

These trends were much the same for use of sterilization; for example, usage was higher with higher economic status and more use of the mass media. But with only 1.6 percent of the total sample (36 individuals) reporting use of sterilization, we could hardly expect large and significant differences. There were significant differences, however, among members of the various religious groups. None of the Confucians reported that they had been sterilized, and only two (0.2%) Muslims. On the other hand, 2.8 percent of the Hindus and Buddhists said they had been sterilized, and 4.6 percent of the Christians. Obviously, we should not make too much of these results because the figures are so small, but this pattern of use fits precisely with the pattern of knowlege of the method, cited above.

Oral Contraceptives (The Pill)

Questions about the pill were asked only of women. As noted, about 5 percent of them had used the pill, and about 62 percent knew of it.

Correlates with these results are about the same as with sterilization. Knowledge of the pill was higher among persons with more education, with higher economic status, and with more media use (Table 8.6).

Fewer Muslims than those of any of the other religious groups had heard of the pill (46.4%) compared to Confucians (55.6%), of Hindus and Buddhists (65.6%), and Christians (84.8%).

When we examine the amount of use of the pill, however, we find the order of acceptance by the religious groups somewhat different. In this case it is the Christians (doubtless spurred by the Roman Catholic church's strong opposition to contraceptives) who make least use of oral contraception. Only 5 of the 165 Christian women in the sample reported that they had used the pill. Hindus and Buddhists and Muslims had only slightly higher percentages of users, but 22.2 percent of the Confucians said they were users. Let us say again that not too much should be made of these figures, because the Confucians had only 9 women answering this question, and the Hindus and Buddhists, only 32. We would feel more confident if these subsamples were 10 times larger.

Multiple regression analysis found that occupation also made a significant contribution to the total amount of use. There was a sharp increase in the use of oral contraceptives with the higher-paying jobs (trade and government service). See Figure 8.7.

Table 8.6

Media Use and Knowledge of the Pill (%)

	Heard of
Radio	
Nonlisteners	41.3
Once a week	78.6
Every day	87.3
Magazine	
Nonreaders	53.1
Readers	87.9
Newspaper	
Nonreaders	49.0
Local paper	93.9
National paper	87.5

Among the media, only magazine reading seemed to be significantly related to amount of use. Only 2.9 percent of nonreaders, but 11.2 percent of the magazine readers, said they had used the pill.

The Intrauterine Device (IUD)

This question also was asked only of the women in the sample. Fewer women had heard of the IUD (56.6%) but more of them had used it than the pill. The percentage of use was 11.3, about one in five of all who knew of the IUD, and a little more than one of every 10 women in the sample. It was proportionately the most used of all the contraceptive methods.

The characteristics of the respondents that seemed to contribute significantly to knowledge were the same as correlated with the use of sterilization—education, economic status, and media use, and (negatively) Islam and Confucianism.

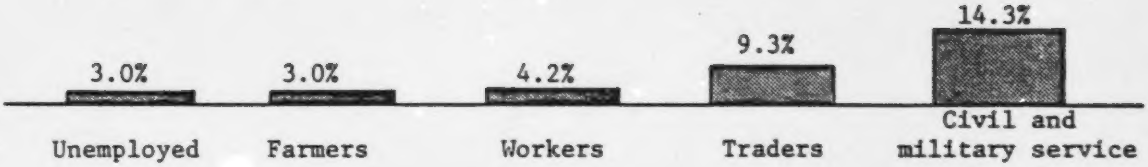


Figure 8.7. Use of Oral Contraceptives, by Occupation

As with sterilization, also, the religious groups which reported the highest percentages of members knowledgeable about the IUD were the Christians (86.7%) and the Hindus and Buddhists (78.1%). Muslims had the lowest percentage of knowledge (34.5%), and the Confucians not much more (44.4%). Knowledge went with use. None of the Confucians or Muslims reported using the IUD, but 34.4 percent of the Hindus and Buddhists, and 24.2 percent of the Christians did.

A variable we have not mentioned before appeared, however, both as a contributor to knowledge and to use of the IUD. This was age. The women in the youngest age group (15-29) were the most likely to know about the IUD. Actually, a little over 70 percent of these young women said they had heard of the device, as compared to under 60 percent for the next highest group. The women most likely to use the IUD, however, were in the 30-39 age group. Much the same pattern appeared in knowledge and use of the pill and, as we shall see, of the condom. Table 8.7 compares the proportions of different age groups who had heard of, and the proportions who used, the three contraceptive devices.

Table 8.7

Knowledge and Use of the Pill, IUD, and Condom, by Age (%)

Age	Pill*		IUD*		Condom**	
	Heard of	Used	Heard of	Used	Heard of	Used
15-29	76.8	8.9	70.5	14.3	79.5	2.9
30-39	65.8	7.7	59.8	21.4	78.3	5.8
40-49	61.4	3.0	57.4	7.9	73.7	2.7
50+	45.7	0.8	41.1	2.3	58.8	0.9

* Percentages of women in the sample.
** Percentages of men in the sample.

All the media appeared to contribute to knowledge of the IUD. Of the nonlisteners to radio, for example, only 35.8 percent had heard of the device, but 84.5 percent of those who listened every day had heard of it. The corresponding percentages were 72.9 among those who sometimes listened, and 71.4 among those who listened at least once a week. A high percentage of local newspaper readers (91.8%) and national newspaper readers (83.3%) had heard of it, compared with 43 percent of those who did not read newspapers. More magazine readers (86.2%) than nonreaders (46.6%) knew about the IUD, and among the relatively few women who had television in their homes, 100 percent knew of the IUD.

The Condom

Questions about the condom were asked only of the men in our sample. Their answers turned up, in regression analysis, a familiar list of variables related in a major way to the distribution of knowledge of the device: positive contributions by education, economic status, and media use; negative ones by adherence to Confucianism and Islam. This was not true of the variables contributing to use of the condom, however. Here the differences by religion were less marked. As a matter of fact, the percentage of users among Confucians was about the same as among Hindus and Buddhists and Christians, and although use generally increased with economic status and education, the relationship was not so clear. In truth, no characteristics of the sample seemed to relate very closely to use of this contraceptive device except use of the mass media. Table 8.8 shows how education, economic status, and occupation related to knowing about the condom.

The media comparisons are convincing. Of the nonlisteners to radio, 49.6 percent had heard of condoms; of the once-a-week listeners, 76.8 percent; of the everyday listeners, 87.7 percent. Among those who did not read magazines, 65.6 percent had heard of condoms, as compared to 90.5 percent of the readers. Of the men who did not read newspapers, 62 percent had heard of condoms, as compared to 84.5 percent of those who read local newspapers and 89.0 percent of the readers of national papers.

This relationship of media to knowledge of the condom also carries over into use of the device, although the number of users is so small that proportions are also smaller. Two-and-one-half times as large a proportion of magazine readers as of nonreaders are users of condoms. Seven times as large a proportion of everyday listeners to radio as nonlisteners use the device. Three times as large a proportion of readers of local newspapers as nonreaders, and, in the small television sample, three times as many viewers as nonviewers, also are among the users. Although the percentages of users are small—(5.8% for magazine readers, 5.3% for radio listeners, 6.8% for newspaper readers, and 8.2% for television viewers), the differences are considerable between those who use the media and those who do not.

Other correlates with use follow the general pattern of the correlates with knowledge, but the figures are small and the curves less steady. In this case, therefore, we must ascribe whatever influence we have found to the mass media.

Table 8.8

Knowledge of Condom, by Education, Economic Status, and Occupation

	%
Education	
None	49.3
Some primary school	70.4
Primary school	78.0
Junior high school	86.2
At least senior high	94.2
Economic Index	
Lower	57.4
Lower-middle	73.5
Middle	76.6
Upper-middle	73.9
Upper	78.4
Occupation	
Unemployed	35.7
Farmers	70.3
Workers	54.7
Traders	74.0
Civil, military service	93.0

Summary

Just under half of the families in this sample sought professional care when the need was urgent—a physician when someone in the family was ill, a physician or registered midwife in time of childbirth. The others sought less professional help. Ten percent go to the medicine man, while 3 percent never went outside the family at all for such help. Ninety-two percent boil their water.

A little over half the families had at least one member of the family vaccinated for smallpox in the last six months; the proportion was the same for typhus, and about 30 percent had been vaccinated for tuberculosis during that period. On the other hand, 15 percent of the families had never had even one member of the family receive one of the three vaccinations.

A majority of the sample had heard of four contraceptive methods—sterilization, the pill, the IUD, and the condom—but only about one in 12 of those who knew about them had used them.

In all these cases, a small group of characteristics seemed to repeat itself as contributors to health behavior—helping to determine who sought the professional care, who made use of vaccination, and who knew about and used contraceptive methods. With few exceptions it was the better educated, the more affluent, and those in the better-paying jobs who were likely to be in that group. In a few cases (for example, the use of some contraceptives), age made a difference.

Religious affiliation wove itself into different health behaviors in ways that are not always easy to understand. Christians were most likely to see a doctor during illness, but Confucians were the most likely to use a physician or registered midwife in childbirth, and Hindus and Buddhists the most likely to go for vaccinations. Christians were the most likely to have heard about contraceptives and the most likely to accept sterilization, but (probably because of the stern attitude of the Roman Catholic church toward contraception) the least likely to use the oral contraceptives. Hindus and Buddhists were the most likely to use the pill and the IUD. More media use—radio, newspapers, and magazines, and television in the few places where it was available at the time of this study—basically correlated with more use of professional care and more knowledge of opportunities for care and contraception.

Chapter 9: PARTICIPATION IN VILLAGE ORGANIZATIONS

Respondents were asked if they or any members of their family joined various organizations that are generally active in Indonesian villages. For those who indicated activity within any organization, a further question was posed to determine if they were "ordinary" members or held leadership positions as members of the organization's board.

The results for 11 major organizations is shown in Table 9.1. Only four organizations involved 30 percent or more of the village families, two involved about 15 percent of the families, and the remainder less than 10 percent. For the most part membership was "ordinary."

The four leading organizations, in order of their relative membership, were Scouts (40%), village social units (39%), family planning organizations (31%), and BIMAS (30%). BIMAS is an organization promoting intensive agricultural development.

Membership in village cooperatives was indicated by only 12 percent of the respondents, and farmer's organizations by 8 percent. The membership of women's organizations totaled 14 percent of the respondents, and health/maternity centers and the Red Cross only 3 percent each. Community education organizations had a membership of 7 percent, and radio listeners' organizations, 4 percent.

In general, membership in any of the organizations tended to be higher among users of either the broadcast or print media. Usually, this relationship was stronger among those organizations with larger memberships. We shall use the village social unit and the community educational organization for illustration (see Figures 9.1 to 9.4). It is interesting to note that the broadcast media were better predictors of membership in BIMAS than the print media (Figures 9.5 and 9.6).

Education was generally positively related to organization membership. With BIMAS and village cooperatives, however, membership was highest among those who had attended primary school (Figures 9.7 and 9.8).

Those in the civil service/military occupational category were generally the most likely to be members of any organization—with the exception of BIMAS--and, further, to be board members. Farmers were the most likely members of BIMAS, farm organizations, and family planning organizations (Figure 9.9). Next to those who had no regular jobs, they were the least likely to be members of the Scout organizations (Figure 9.10).

Economic status was not strongly related to membership in most of the organizations, although those in the middle economic group were the most likely to be members of BIMAS and family planning organizations.

Age relationship was evidenced in three organizations. Family membership in Scout organizations was reported more frequently by respondents in their middle years. Family planning membership was particularly strong among respondents in their thirties, and membership in women's organizations was primarily among those under 50.

Religion was frequently related to membership. With one exception, Scout organizations (Figure 9.11), Confucians were less likely than other religious groups to be members. Obversely, Christians generally were the most likely to be members of organizations. Muslims and Hindus and Buddhists generally fell between the Confucians and Christians in group member levels. Membership in village social units, for example, by religious groups is shown in Figure 9.12. There were two exceptions to this. Hindu and Buddhist respondents reported the highest levels of membership in BIMAS and family planning organizations (Figures 9.13 and 9.14).

For the most part, there was no difference in the response of men and women. However, male respondents were more likely to report family membership in Scout organizations and BIMAS.

Table 9.1

Participation in Various Village Organizations (%)

Organization	Non-member	Ordinary Member	Board Member
Scout organization	59.9	37.1	2.9
Village social unit	61.4	31.2	7.4
Family planning organization	68.8	28.9	2.4
BIMAS	70.4	29.2	0.3
Women's organization	85.7	13.3	1.0
Village cooperative	87.5	11.3	1.2
Farmers' organization	91.5	8.0	0.5
Community education organization	93.3	6.1	0.5
Radio listening organization	96.4	3.4	0.2
Health/maternity center	96.8	3.2	0.0
Red Cross	97.1	2.8	0.1

The question was: "Do you, or any other member of your family, join any organizations? If yes, which of the following organizations? What kind of member—ordinary or a member of the board?".
Numbers may not add to 100 percent due to rounding.

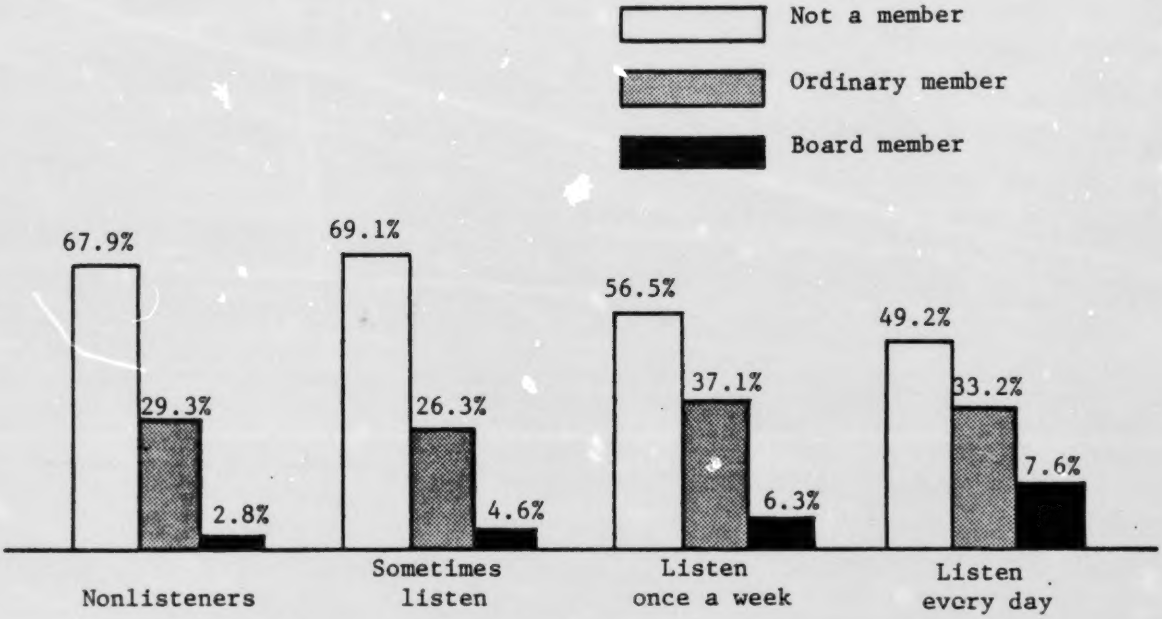


Figure 9.1. Radio Listenings and Membership in Village Social Units.

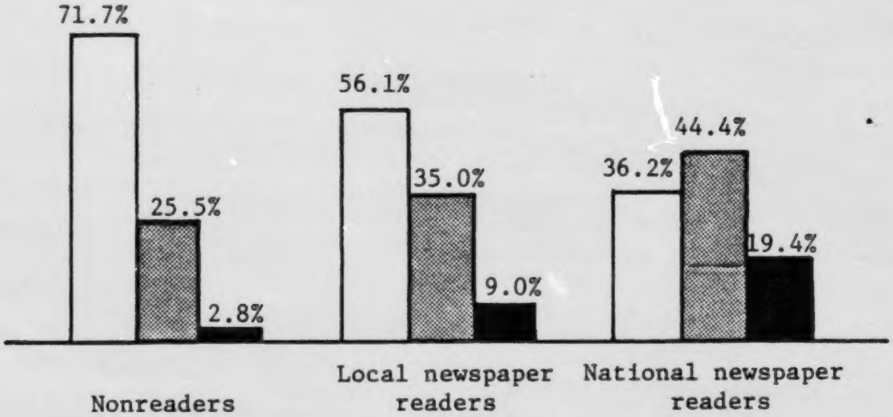


Figure 9.2. Newspaper Reading and Membership in Village Social Units.

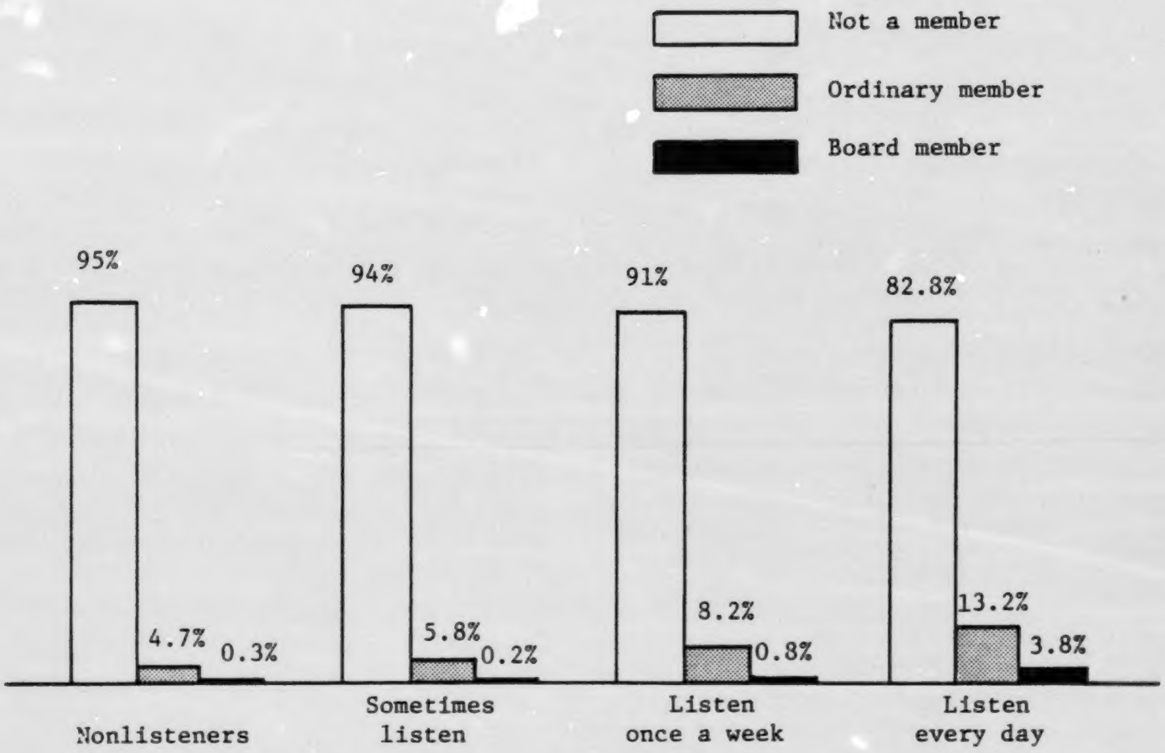


Figure 9.3. Radio Listening and Membership in Community Educational Organizations.

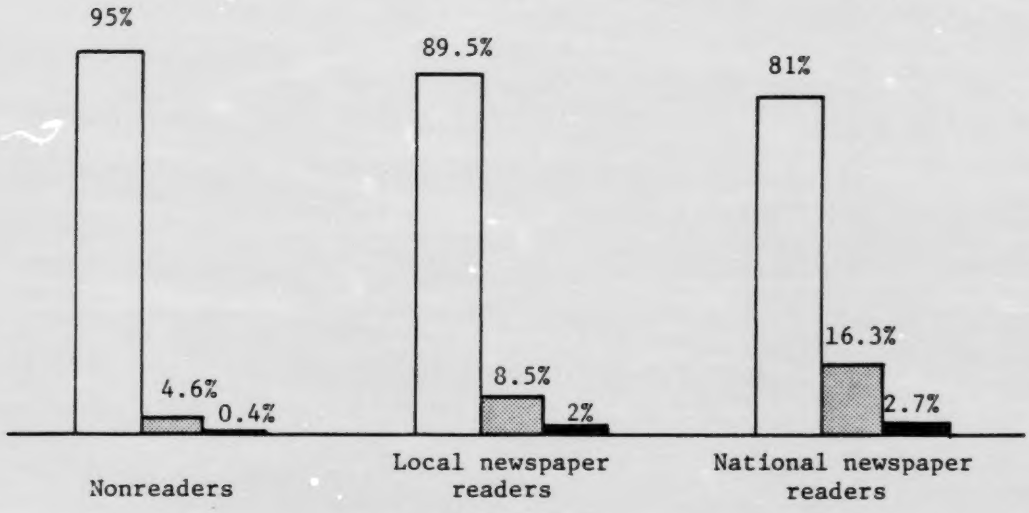


Figure 9.4. Newspaper Reading and Membership in Community Educational Organizations.

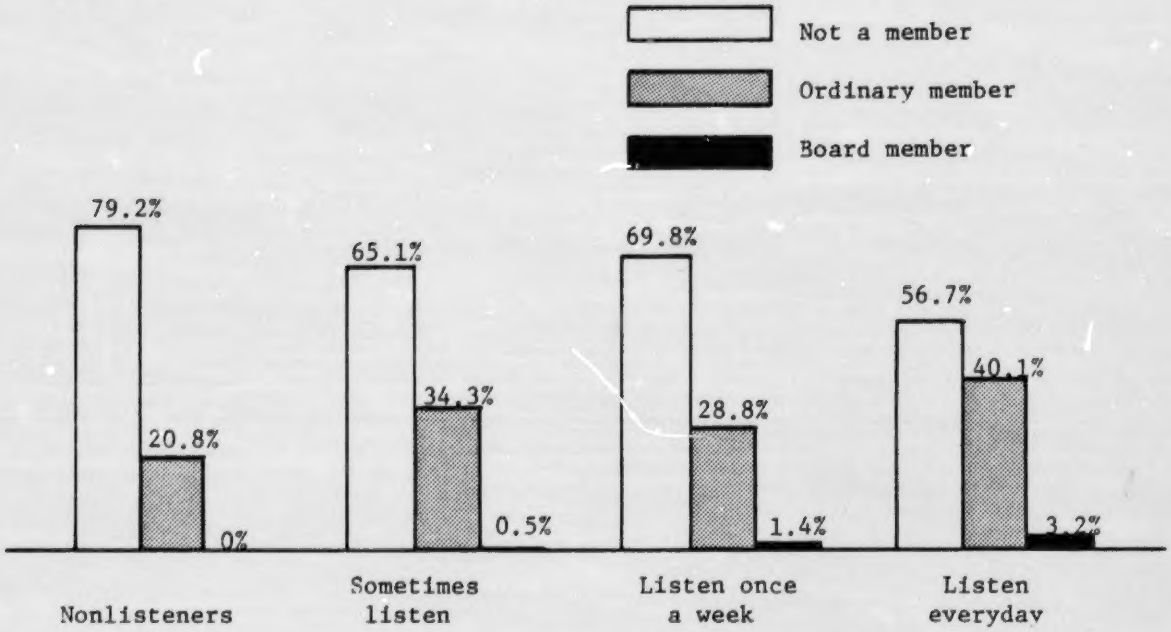


Figure 9.5. Radio Listening and Membership in BIMAS.

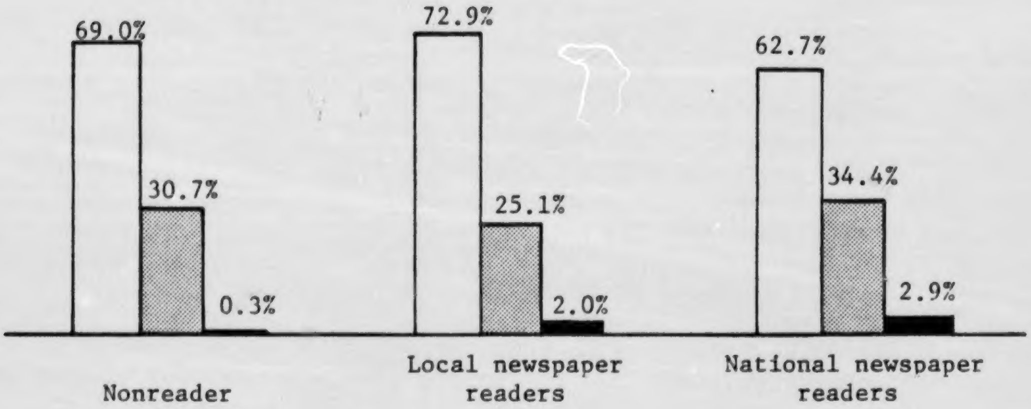


Figure 9.6. Newspaper Reading and Membership in BIMAS.

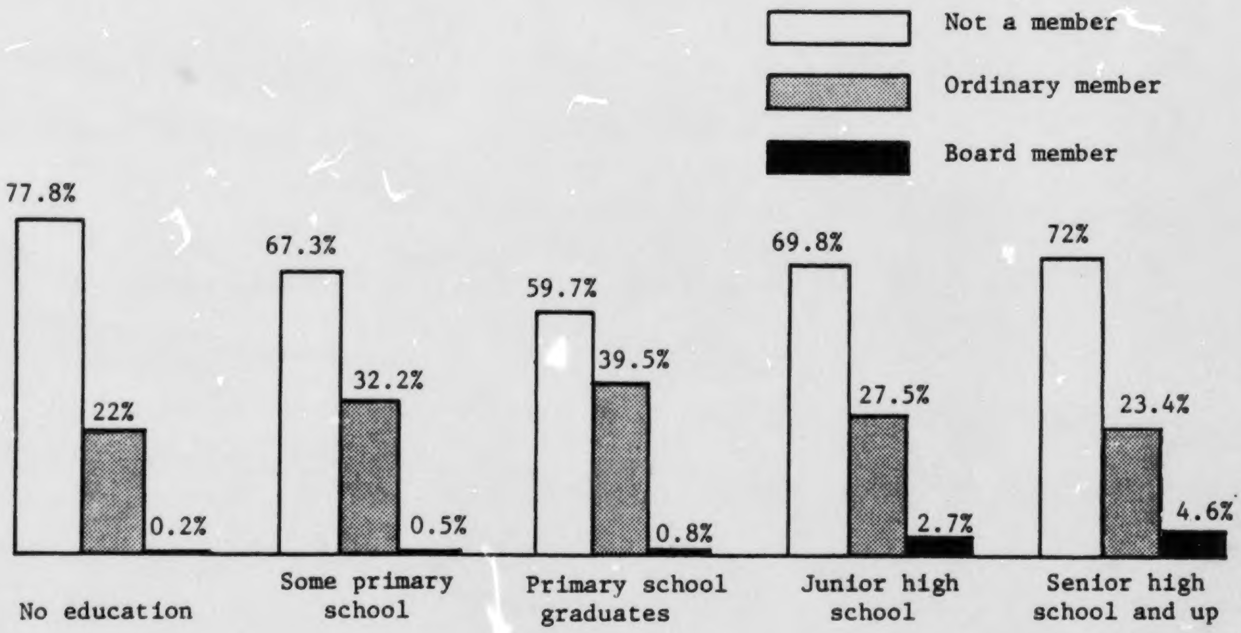


Figure 9.7. Education and Membership in BIMAS.

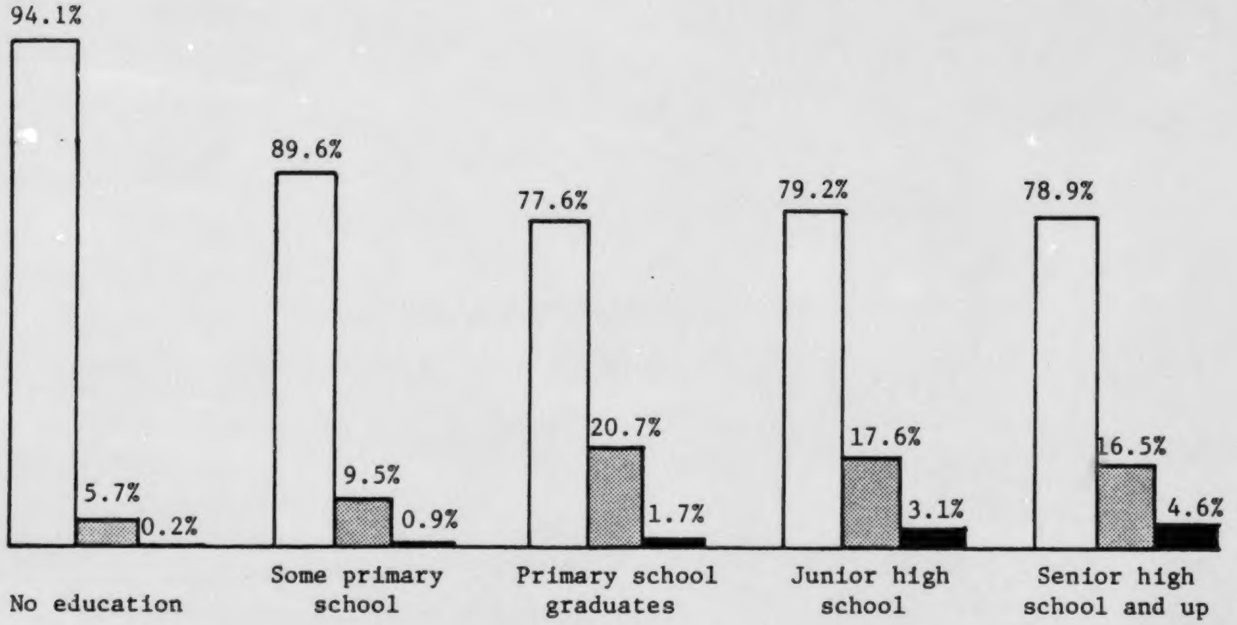


Figure 9.8. Education and Membership in Village Cooperative.

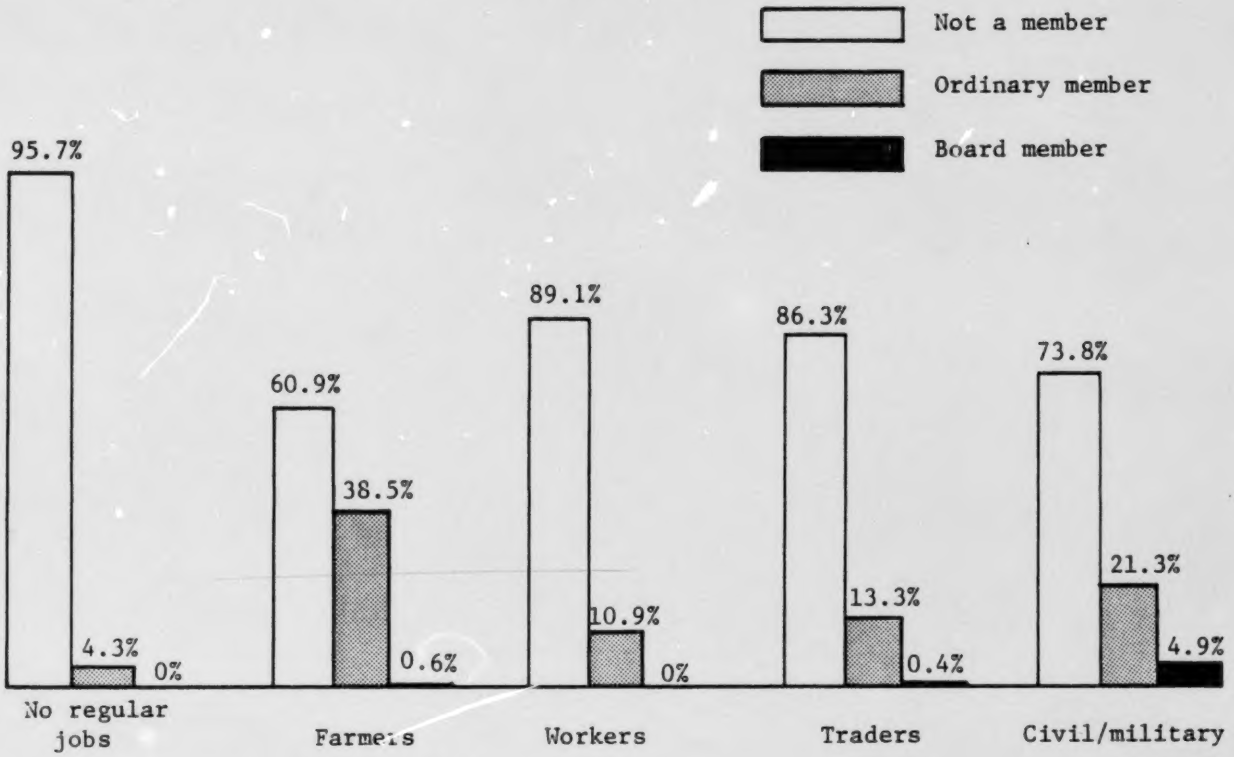


Figure 9.9. Occupation and Membership in BIMAS.

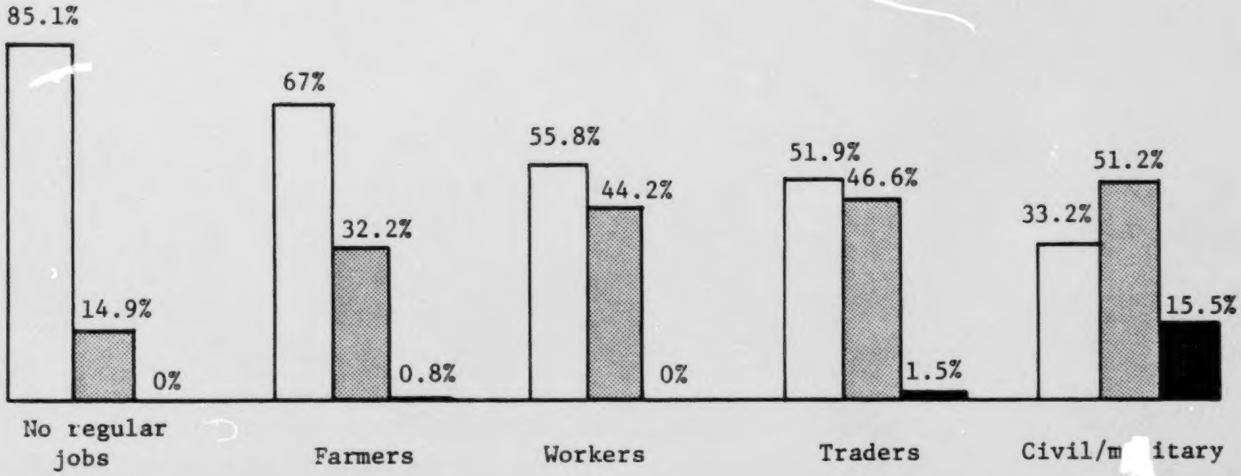


Figure 9.10. Occupation and Membership in Scout Organizations.

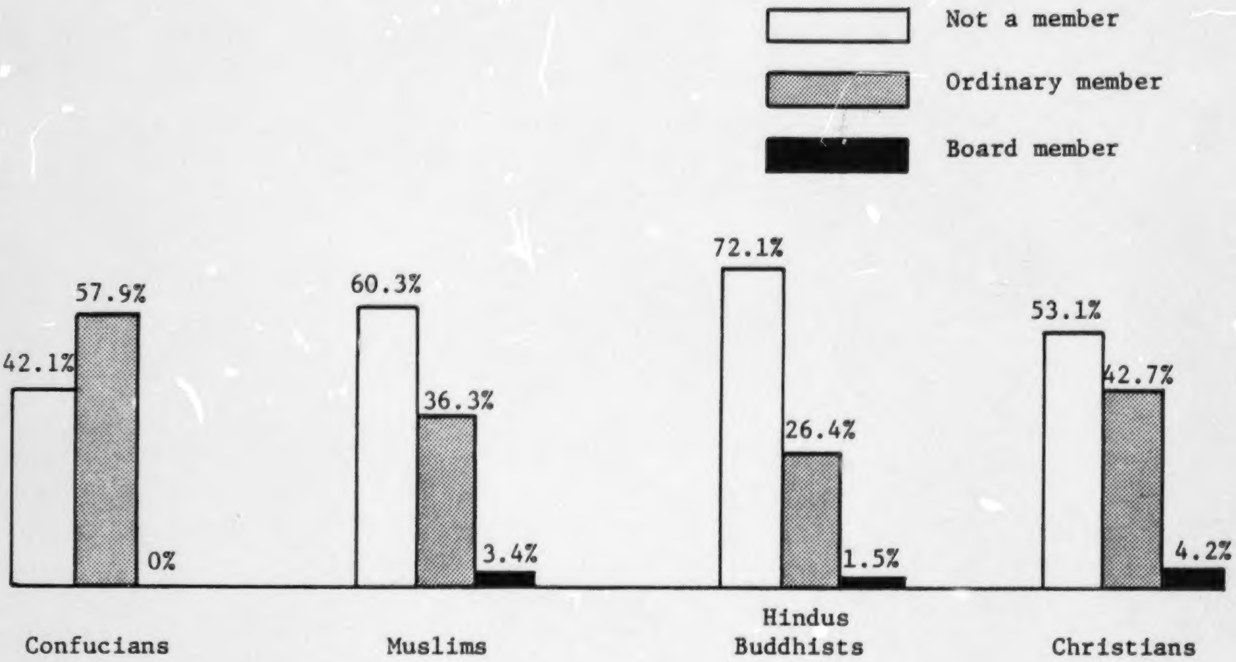


Figure 9.11. Religion and Membership in Scout Organizations.

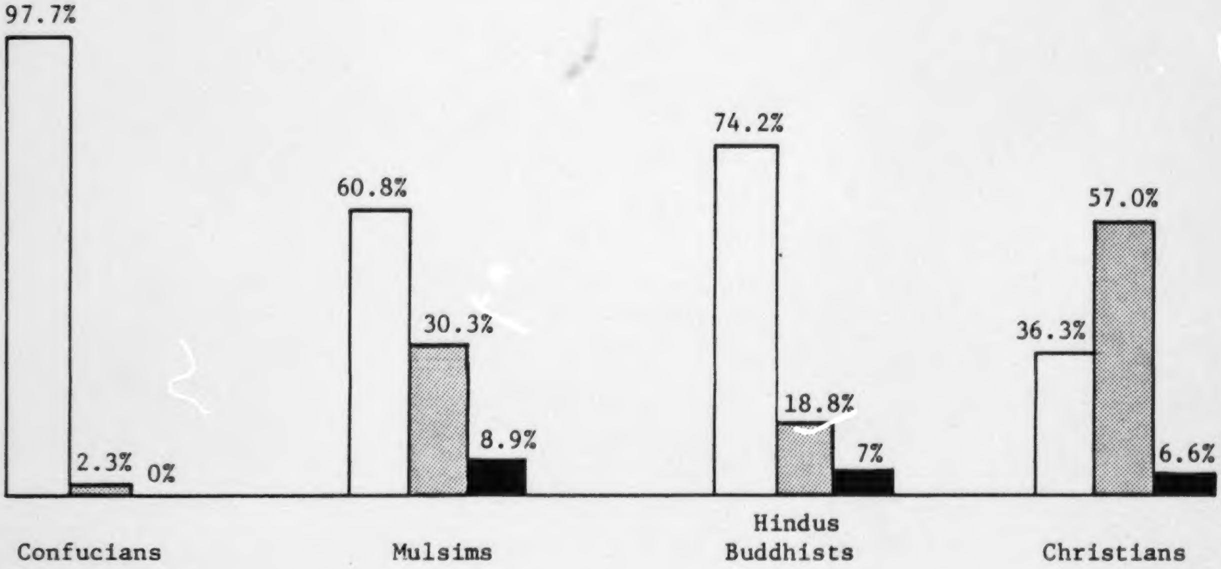


Figure 9.12. Religion and Membership in Village Social Units.

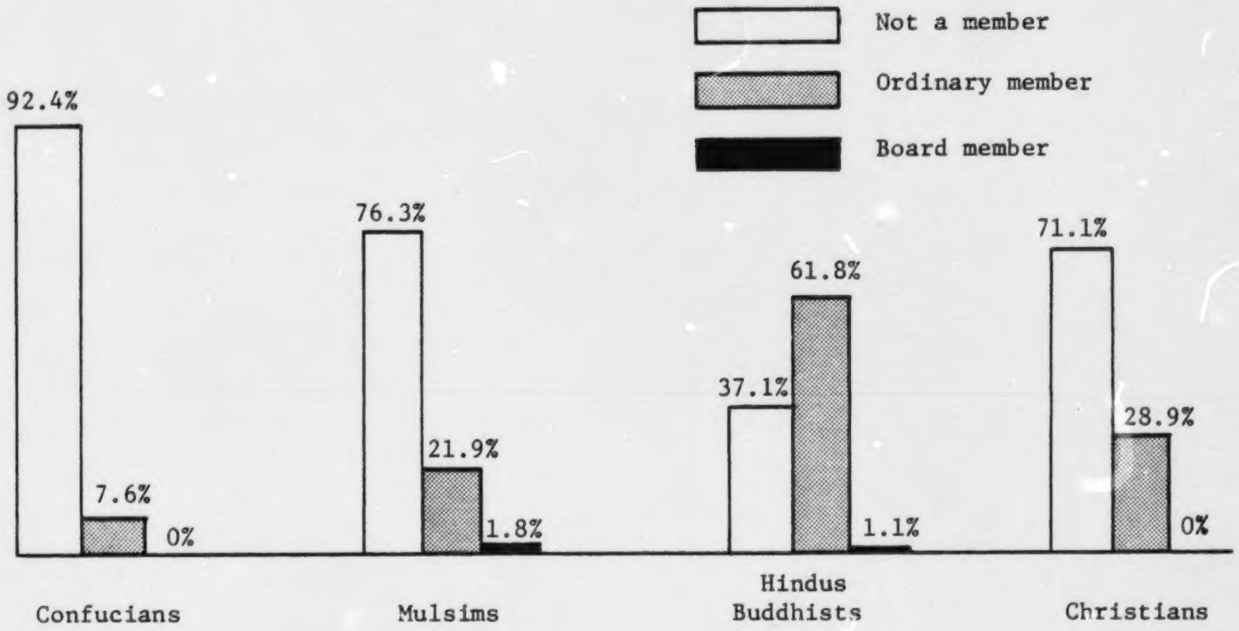


Figure 9.13. Religion and Membership in BIMAS.

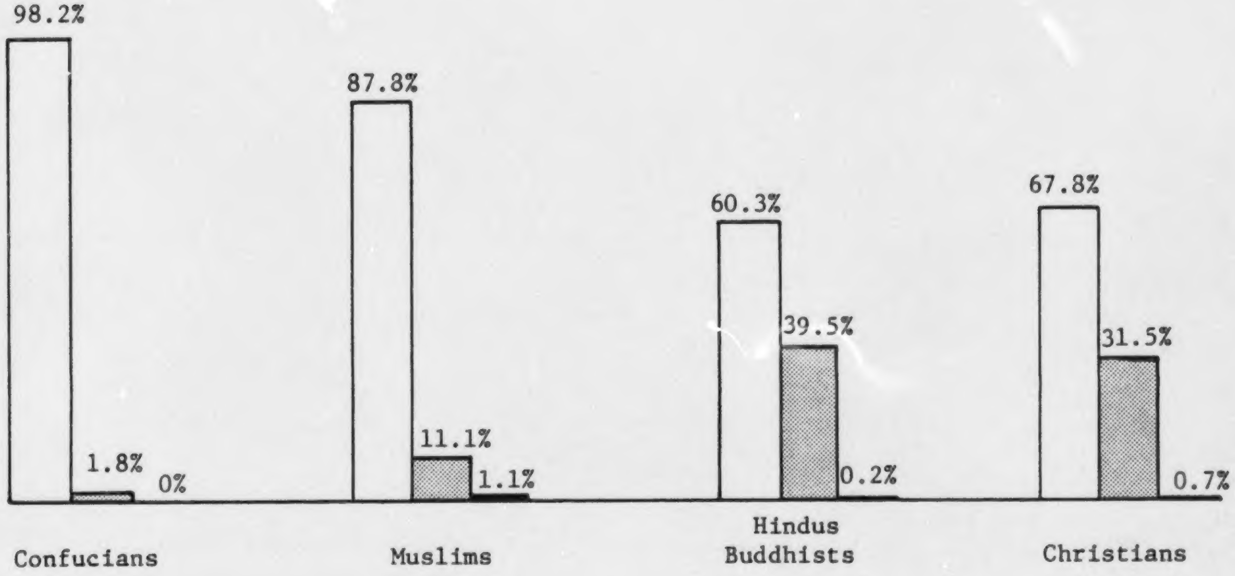


Figure 9.14. Religion and Membership in Family Planning Organizations.

Summary

Scouts, village social units, family planning organizations, and BIMAS (intensive agricultural development organizations) were the major organizations in terms of membership among respondents. Red Cross, health/maternity, and radio listening organizations had membership in less than 5 percent of the households represented.

In general, organization membership--whatever the organization--was higher among those who were users of mass media.

There was a scattered pattern of relationships between demographic variables and membership in the 11 organizations for which data was collected.

Religious affiliation was one of the more consistent indicators. In general, Christians were the most likely to be group members, and Confucians, the least likely. Those in the civil service/military occupational group were highest in membership of most organizations, although farmers were high in family planning, BIMAS, and farm organizations.

Chapter 10: LANGUAGE AND COMMUNICATION BETWEEN ETHNIC GROUPS

Do the People Understand Spoken Indonesian?

Bahasa Indonesia is the official language of the country, but about 25 languages and 250 dialects are spoken by substantial groups of people. Among the "nonofficial" languages are several South Indian tongues and Chinese. Because of the colonial history of the country, Dutch is also spoken in a few places. The first question that concerns us in this chapter, therefore, is how widespread is the use of the official language?

We could not measure this for the entire population, of course, but our sample gave us some idea of the distribution of language skills. We asked all our respondents in the five regions, "Do you understand most of the messages that are brought to you (verbally) in Bahasa Indonesia?" Overall, 81.4 percent said they could understand the Indonesian language messages.

Who are the 81 percent able to use the official language? In general they were the younger people (especially those in the 15-29 and 30-39 age groups), presumably because they were most likely to have used the language in school; people with more education, probably for the same reason; people of higher economic status; and people with occupations which were more likely to require them to use the official language (for example, civil service employees, military personnel, and traders).

A multiple regression analysis showed that education and economic status were more likely than other characteristics to contribute to the likelihood of being able to understand Bahasa Indonesia. See Tables 10.1 and 10.2.

Table 10.1

Education and Understanding of Messages Brought Orally

Education	Able to Understand (%)	N
No education	48.8	477
Some primary school	82.0	776
Primary school	95.4	518
Junior high school	96.9	255
Senior high school and college	99.5	218
Total	81.4	2,244

Table 10.2

Economic Status and Understanding of Messages Brought Orally

Economic Status	Able to Understand (%)	N
Lower	56.0	459
Lower-middle	80.2	439
Middle	85.6	450
Upper-middle	92.0	477
Upper	94.0	419
Total	81.4	2,244

Occupation, as we have indicated, appears to relate to use of the official language to the extent that the job requires its use. Thus, only 66 percent of those who had no regular jobs, but 77 and 79 percent, respectively, of farmers and workers, 90 percent of traders, and 99 percent of persons in the civil service and the military said they could understand Bahasa Indonesia. The decrease in ability to understand the language as age increased was less marked, but steady: 88 percent for persons 15 to 29 years of age, 87 for those in the 30-39 group, 81 for the 40-49 group, and 72 for persons 50 and over. Another difference worth mentioning is that related to sex: 71 percent of women, and 84 percent of men reported they could understand the official language. This difference, too, must have something to do with average level of education and need to use the language in one's occupation.

There were also differences by media use in ability to understand Bahasa Indonesia, but these seemed to be secondary effects of education and economic status. Thus, for example, only 70 percent of nonreaders of a newspaper, but 98 percent of readers, said they understood the official language. Only 75 percent of nonreaders of magazines, but 99 percent of readers, said they understood Bahasa Indonesia. Sixty-two percent of nonlisteners to radio, but 92 percent of those who listen at least once a week and 94 percent of those who listen every day, could understand the language.

Finally, the difference by religion is worth noting. Ninety-seven percent of the Christians, 88 percent of the Confucians, 77 percent of the Muslims, and 75 percent of the Hindus and Buddhists said they understood the official language. These figures should be compared with the tables on education, occupation, and economic status, by religion, elsewhere in this volume.

How Many Can Read the Language?

The figures on ability to read Bahasa Indonesia are very similar to those on ability to understand it when spoken, although generally lower. Overall, 68.7 percent reported they could read a message in the official language, as compared to the 81.4 percent who said they could understand it. As in the case of oral use of the language, the ability to read it was closely related to the amount of education a person had and less closely related to economic status, newspaper reading, radio listening, sex, and religion, but the same characteristics grouped together as in the case of oral use of the language, and with only a few exceptions the differences were in the same direction.

The less education an individual had, the greater the difference between his or her ability to understand the spoken language and to read the written language; but as the amount of education increased, the ability to read more closely approximated the ability to understand the language as spoken. Among persons who had at least completed secondary school, there was no longer a difference in the likelihood of possessing the two skills. See Figure 10.1.

The relationships of reading skill to most of the other variables was much like those we saw in the case of ability to understand the spoken language. For example, the ability to read increased steadily with economic status (42% among those in the lower economic bracket, compared to 84% among those in the upper bracket) and decreased with age (83% for those 15 to 19 years of age, 51% for those 50 or over). Civil service employees, military personnel, and traders were far ahead of other occupations in ability to read; men were more likely than women to be readers (72% to 56%); and media-users had higher percentages of those who were able to read than nonusers. It may be interesting to compare the amount of use of the three most common media by ability to understand and to read the spoken language (Figure 10.2). As we might expect, the amount of radio use seems to be more closely related to use of the spoken language than the written one, but in the case of the other two media very little difference showed up between those who understood and those who also read the language.

There is an interesting difference between the correlations of listening and reading skills with religion. As we have seen, the Christians ranked highest in the percentage of people who understood the official language, and they ranked the same in percentage able to read the language. But among those able to understand the spoken language, Confucians ranked second, not far below the Christians, whereas in ability to read the language the Confucians ranked a distant fourth (Table 10.3). It seems likely that the reason for this difference is occupational. The Chinese Confucians, so many of whom are traders, may have greater need for the official language in their spoken than their written communication.

How Much Do They Use the Official Language for Writing?

We have examined the passive side of written communication in terms of how much our sample reads. It is useful now to look at the active side—how much do they write?

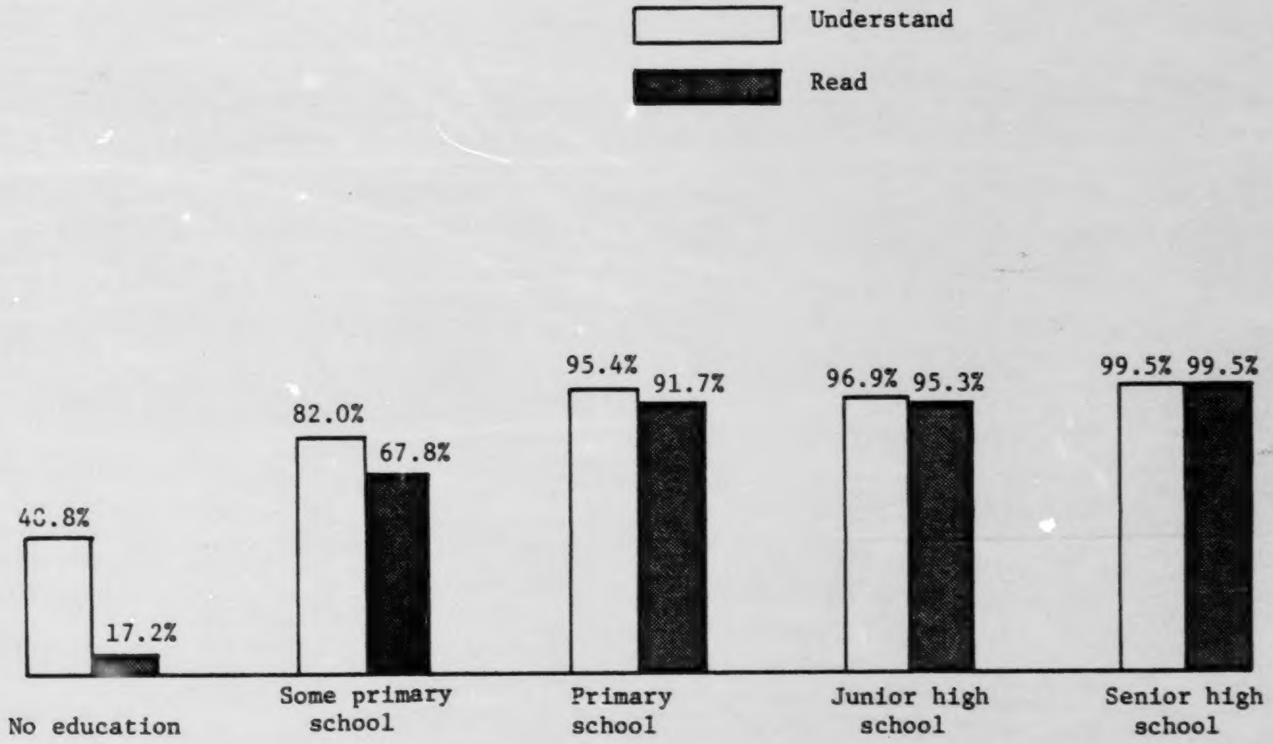


Figure 10.1. Ability to Understand and Read Bahasa Indonesia, by Amount of Education.

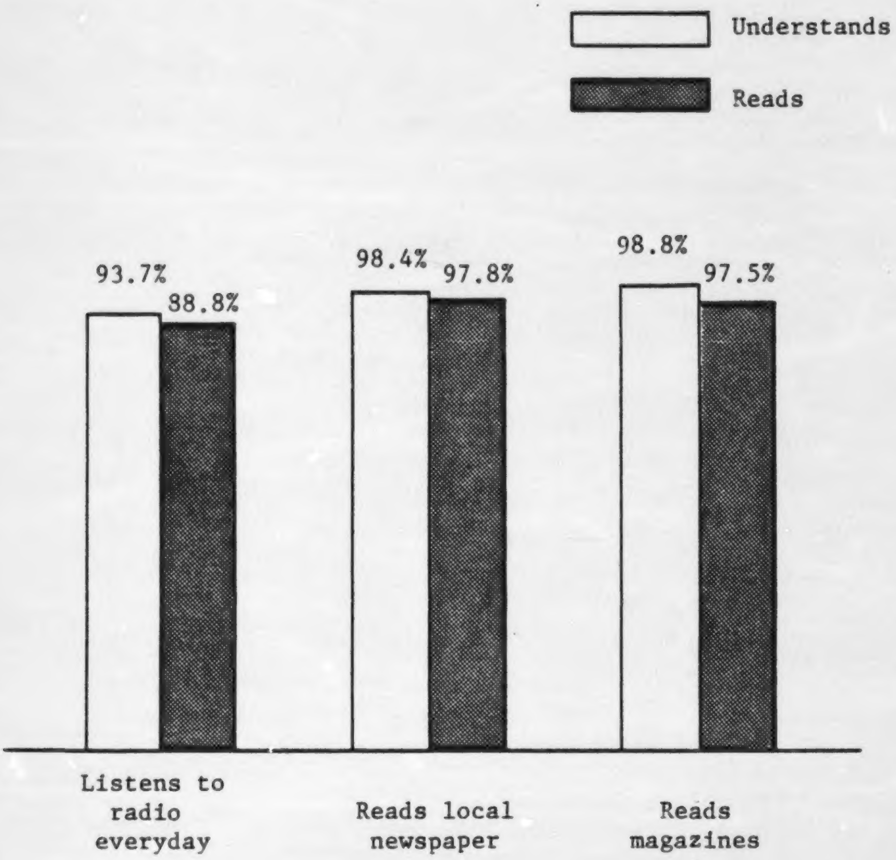


Figure 10.2. Amount of Radio, Newspaper, and Magazine Use and the Ability to Understand and Read Bahasa Indonesia.

Table 10.3

Ability to Understand and Read the Official Language, by Different Religious Groups

Religion	Able to Understand (%)	Able to Read (%)	N
Confucianism	87.7	48.5	171
Islam	76.7	63.5	1,148
Hinduism-Buddhism	74.7	68.1	458
Christianity	97.4	89.6	454

We tried to get some information on this by asking how many letters each respondent had written in the last six months. Perhaps the most interesting result was that out of 2,238 respondents who answered that question, almost 70 percent had written no letters whatsoever during the last half year. The findings on the remaining respondents were as follows: one letter (7.1%); two letters (7.1%); three letters (5%); four letters (2.5%); five letters (1.5%); six letters (2.5%); seven or more letters (5%).

The correlations with letter writing were about the same as with reading, except much lower. The more education, the higher economic status, the more prestigious the occupation (counting civil service and military as most prestigious and probably best paying), the more likely a person was to write letters. Men wrote more than women. Persons who were more likely to read newspapers and magazines were also more likely to write letters as were people who listened more often to radio; Christians, although not by much over the other religious groups; and people below 40. In other words, the pattern is almost unvaried: the more likely one was to read, the more likely he or she was also to write. That finding is hardly surprising, but its consistency is encouraging.

What Language Is Used between Ethnic Groups?

We have noted the large number of ethnic groups, languages, and dialects in Indonesia. Therefore, there is some reason to ask how much communication goes on between these different groups, and to what extent the official language is used for such communication.

So far as our sample included a cross-section of the people of Indonesia, this survey indicated that about 85 percent of them did talk with members of other ethnic groups, and that about 86 percent of those—73 percent of the total sample—used Bahasa Indonesia for that purpose. This is a rather encouraging indication of how much the official and, it is hoped, integrative language was being used.

The characteristics of individuals that related to talking with other ethnic groups, and using the official language for that purpose were almost exactly the same as for the other behaviors we have examined in this chapter. That is to say, the persons most likely to talk with ethnic groups other than their own, and to use Bahasa Indonesia for that purpose, were those with more education, with higher economic status, in a privileged occupation such as the civil service and military, males rather than females, and users of the print and broadcast media. This seems to mean that communication between ethnic groups and communication between these groups in the official language correlate with high communication in general, and with life patterns that seem to encourage heavy use of communication.

The data in Table 10.4 is especially interesting because it suggests that communication between ethnic groups is likely to grow rather than decline. When the sample was divided by age, it becomes clear that the younger people were more likely to communicate with persons in other ethnic groups than were the older people. Furthermore, the younger ones were more likely to communicate with other ethnic groups in the lingua franca—Bahasa Indonesia. Thus one of the reasons for having an official language seems to be paying off as the national leadership had intended it to.

Table 10.4

Language Used in Communicating with Other Ethnic Groups, by Age

Age	Talk with Other Ethnic Groups (%)	Proportion of Those Who Do so in Bahasa Indonesia (%)	N
15-29	89.7	90.9	428
30-39	84.5	90.6	708
40-49	86.5	83.2	517
50 and over	80.4	79.3	583

Table 10.5 recalls some figures presented earlier on the relation of religious groups to the use of the official language.

Perhaps a word of warning is in order. When interpreting Tables 10.4 and 10.5, note that the second column of figures applies only to those who talk to other ethnic groups. That is to say, the proportion of Hindus and Buddhists who used the official language in talking to other ethnic groups was really 84.5 percent of 69 percent, or 58.3 percent of the total. Although it is higher than the corresponding percentage for Muslims (81%), it actually represents a lower proportion of the total group because the percentage of Hindus and Buddhists who engaged in any communication with other ethnic groups

Table 10.5

Language Used in Communicating with Other Ethnic Groups, by Religion

Religion	Talk with Other Ethnic Groups (%)	Proportion of Those Who Do So in Bahasa Indonesia (%)	N
Christianity	97.6	97.3	453
Confucianism	97.0	89.6	168
Islam	84.3	81.0	1146
Hinduism-Buddhism	69.0	84.5	458

was relatively small. We leave the interpretation of these differences by religious groups to others.

How Much Intermarriage Is There between Ethnic Groups?

Another measure of contact between ethnic groups is the amount of intermarriage. It amounts to just over 10 percent, if our sample is representative; that is, 10.4 percent of the persons interviewed in this study were married to a member of another ethnic group.

Who were these persons who had gone outside their own group to marry? They were higher economic groups (17.4% in the upper economic bracket, as compared to 15.3% in the upper-middle, 7.6% in the middle, 8.5% in the lower-middle, and 3.7% in the lower); better paid occupational groups (23.1% in the civil service and military, as compared to 10.8% of traders, 10.4% of workers, and 7.6% of farmers); those educated beyond primary school (5.5% for no education, 7.6% for some primary school, 12.4% for primary school graduates, as compared to 21.6% for junior high school, and 14.0% for senior high and college); and more likely to be Christians (15.1%), or Muslims (12.7%) than Confucians (3.1%) or Hindus and Buddhists (3.0%).

Differences by age were not significant, but intermarriage seemed to relate to more than average use of the media. The pattern was consistent, as Table 10.6 shows. We have included the relatively small number of respondents who had television at the time of the survey. These figures are sufficiently like other tables we have presented to make us suspect that they reflect education, occupation, and economic status rather than any special influence of media use. But the fact that these demographic elements cluster together in so many cases with increased media behavior, increased contact with other ethnic groups, and even with intermarriage among ethnic groups, is itself worth noting.

Table 10.6

Media Use and Ethnic Intermarriage

Media Use	% Intermarrying
Radio	
Listen every day	18.6
Nonlisteners	5.9
Newspapers	
Readers	17.8
Nonreaders	6.8
Magazines	
Readers	15.9
Nonreaders	7.7
Television	
Viewers	21.0
Nonviewers	9.0

Summary

Because of its variety of ethnic groups and the many languages and dialects they speak, Indonesia is interested in how much its official national language, Bahasa Indonesia, is being used. More than 80 percent of the persons in this sample said they were able to understand Bahasa Indonesian. Over 68 percent said they were able to read it. Asked how many letters they had written in the last six months as a rough approximation of how much active use they made of the written language, 69.3 percent said they had written none, just over 7 percent said that they had written one, and 5 percent said that they had written seven or more.

What language do they use in speaking to members of other ethnic groups? Seventy-three percent said they used the official language, just under 12 percent that they used languages other than the official one, and a little over 15 percent that they did not talk to members of other ethnic groups.

Pushing further into their intergroup relationships, they were asked whether they were married to a member of another ethnic group. "Yes" was the answer given by 10.4 percent. Both the amount of use of the official language for talking to members of other ethnic groups and intermarriage with members of other groups all seemed closely related to more than average education, higher economic status, and higher paying jobs (notably civil service and military employment). Younger people were more likely than older ones and Christians were more likely than other religious groups to fit into this relationship. Media behavior in general—more listening to radio, reading of newspapers and magazines, and among the relatively few people who had television, viewing—also related closely not only to education, occupation, and economic status, but also to the use of the official language for communication, and intermarriage with other ethnic groups.

Chapter 11: PRINCIPAL SOURCES OF DEVELOPMENT INFORMATION

In this chapter we are going to talk about the flow of information into and out of eight of the principal Indonesian development programs—the Presidential Decree Schools, the Agricultural Development Program (BIMAS), the Health Centers, the Small Credit Program, the Cooperative Movement, Support for Development of Small Industries (BIPIK), the Savings Movement, and the Family Planning Program.

If we could imagine one composite program with the qualities and the audience-attracting characteristics of these eight programs, then we could say that about 63 percent of the more than 2,245 Indonesians in our sample had heard of that "average" program, and 37 percent of the people had not heard of it. Actually, of course, these figures vary greatly by program. Almost everyone had heard of the Agricultural Development Program (89.6%) and the Family Planning Program (89.5%). On the other hand, only a tiny minority (8.6%) had heard of BIPIK, and only 13 percent knew of the Small Credit Program. The Savings Movement was about at the average—63.6 percent; Presidential Decree Schools, Health Centers, and the Cooperative Movement were, next to the two mentioned above, among the best known.

The more people who had heard of the program, the more who discussed it in their homes or communities. Overall, a little under 70 percent of those who had heard of a program said they had already discussed it. The relationship between hearing and discussing can be seen in Table 11.1.

The programs known by the most people were also discussed by the most people. The incentive to discuss grows with knowledge; the more people with whom one can talk about a program, the more likely one is to want to talk about it. And when information is in the hands of only a few people, as in the case of BIPIK, there is also less reason to talk about it.

To sum up, then, about 6 in 10 of our sample had, on the average, heard of a given development program, and of those who knew of it about 7 in 10 had discussed it. To put that more negatively, a little over one-third of the Indonesians in our sample had never heard of an "average" program, and a little over half of all the people in the sample had never discussed an "average" program. In other words, the line of silence regarding the development programs had not yet quite passed half the population when this study was made.

Who Are the Persons Most Likely to Hear of Programs?

Using multiple regression analysis, we looked for a general pattern by which to identify the parts of the population most likely to receive information about a development program. The people most likely to hear about a development program were those who had the most education and were most likely to expose themselves to the mass media—especially radio.

By regression analysis we identified for each of the eight programs the characteristics of persons in the sample most likely to have received information about each of the programs. The chief predictor and the second best predictor in each case are listed in Table 11.2.

Table 11.1

Percentage of Sample
Who Had Heard of and Discussed Development Programs

Program	Heard of It	Discussed It
Presidential Decree Schools	85.7	65.8
Agricultural Development	89.6	72.7
Health Centers	79.7	57.4
Small Credit Program	13.0	*
Cooperative Movement	75.4	55.3
BIPIK	8.6	5.0
Savings Movement	63.6	43.4
Family Planning	89.6	71.7

* Deleted from this table because of incomplete data.

Table 11.2

Chief Predictor and Secondary Predictor
of Recipient of Information about Development Programs

Program	Chief Predictor	Secondary Predictor
Presidential Decree Schools	Amount of education	Amount of radio listening
Agricultural Development	Radio	Religion
Health Centers	Education	Radio
Small Credit Program	Occupation	Education
Village Cooperative Program	Education	Radio
BIPIK	Radio	Religion
Savings Movement	Education	Radio
Family Planning	Education	Radio

This should not be interpreted to mean that the largest amount of information necessarily comes directly from school experience, or that religious beliefs necessarily have anything to do with how much a person knows about a given program, or that radio—important though it is—is necessarily the medium that conveys most information about a given program. The relationship is more complex than that. A person's experience in school is likely to build up the habit of reading and listening and consulting experts; religion is likely to define where a religious group lives and therefore what its occupational needs and interests are likely to be and consequently what kind of information its members will seek; and radio listening is likely to be the way a person first finds out about a program, but for more detailed information he or she is likely to turn to print or to an expert advisor. These relationships will become clearer when we look at the individual programs.

In general, however, we found that the following pattern holds for describing those most likely to know of a development program. They were:

- *Under [illegible]0*, rather than older ones.
- From the *more affluent economic groups*.
- Had *more than average education*.
- Made *more than average use of media*.
- In *higher paying occupations*, and especially in government service.
- *Men*, rather than women.
- In an occupation that a given program is designed to serve (for example, farmers in the case of the Agricultural Development Program).

Information Sources by Programs

There were four principal direct sources of information on the development programs: the mass media, of which we have already spoken; the village head, who represented government; the information worker, who represented the development program and the extension service; and one or other of a series of special institutions or services or officers with the responsibility for a special program—for example, there was an agricultural and village cooperative officer who had special responsibility for the Agricultural Development Program; a family planning worker with special reponsibility for that program; and the Bank of Indonesia, which was assigned a large part of the information task for the Small Credit and Savings Program. Of these sources, the village head was mentioned most often when people were asked where their information about development programs came from (an average of 24.8%). The special services came next with an average of about 15 percent, the media next (11.1%), and in fourth place the information worker (8.5%). These, along with the total who have never heard of the program, do not quite add up to 100 percent. The remaining percent represent a variety of sources and services that are too varied and usually too small to list.

Figure 11.1 shows the profile of sources of information about the Presidential Decree Schools. Here obviously the village head was the principal source of information. Who depended on him? Chiefly, the people in the middle level occupations—neither the unemployed nor the government and military servants; the people in the lower middle class; the people with the least education; the people who made less than average use of media; the Hindus and Buddhists, largely settled in Bali; and the Christians, largely in North Sulawesi. We could also ask who depended chiefly on the information worker, but it is apparent that he or she was not the chief dispenser of information on this topic, and the differences are not large enough to be significant.

Figure 11.2 shows a similar profile for the Agricultural Development Program. In this case, the "special source" was the agricultural and village cooperative officer, who for this program took over the task from the village information officer. This specialist and the village head were the principal sources mentioned by the sample.

The farmers, of course, were the chief clients both of the agricultural officer and the village head for the Agricultural Development Program. Consequently, these clients tended to come from the middle economic groups, the middle educational groups, and from all age groups about equally. There were several interesting differences, however, between the people who drew their information chiefly from the agricultural officer and those who depended on the village head. For one thing, the people who used the agricultural specialist were a bit more likely to be heavy users of the media than were those who depended on the village head. The Christians and the Muslims were somewhat more likely to get their agricultural information from the village head than from the agricultural officer. Males and females were about equally likely to talk over the agricultural program with the village head, but males are more likely to talk about it with the agricultural officer.

A profile of information sources on the Health Centers is given in Figure 11.3. In this case the "special source" was the family planning worker, who was attached to, sometimes in charge of, the Health Center. Therefore, the situation was somewhat like the one just described, in which the two chief local sources were the village head as the general adviser, and the family planning specialist. There are several interesting differences between the people who chiefly used the generalist and those who chiefly used the specialist. For one thing, the younger age groups were much more likely to go to the family planning officer, who supposedly had the information they more often needed. The better educated people also tended to go to the specialist, as did the chief users of newspapers and magazines. Strangely, there was no such difference related to the amount of radio listening. Women were more likely to go to the family planning officer, men to the village head or the information worker. There was no clear difference by economic status, and both Christians and Hindus and Buddhists were more likely than Muslims and Confucians to go to both village head and family planning worker on health matters.

The proportion of the population with knowledge of the Small Credit program was so small that it is hardly worthwhile to present a detailed profile. Media were the chief source, both radio and reading (5.3% for media, 3.1% for the village head). The Bank of Indonesia served as a special source of information for this area, but was mentioned by less than 2 percent of the

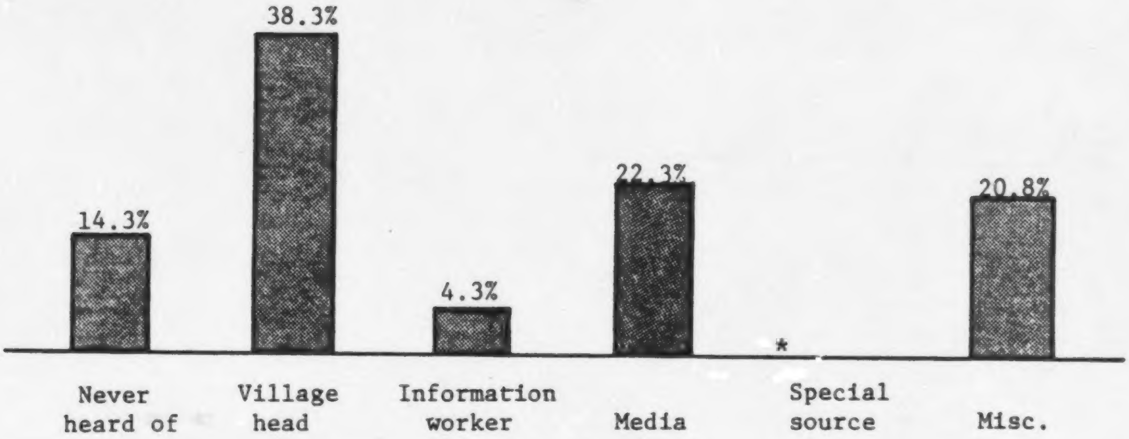


Figure 11.1. Sources of Information about the Presidential Decree Schools.

* A blank indicates no entry in this category over 1 percent.

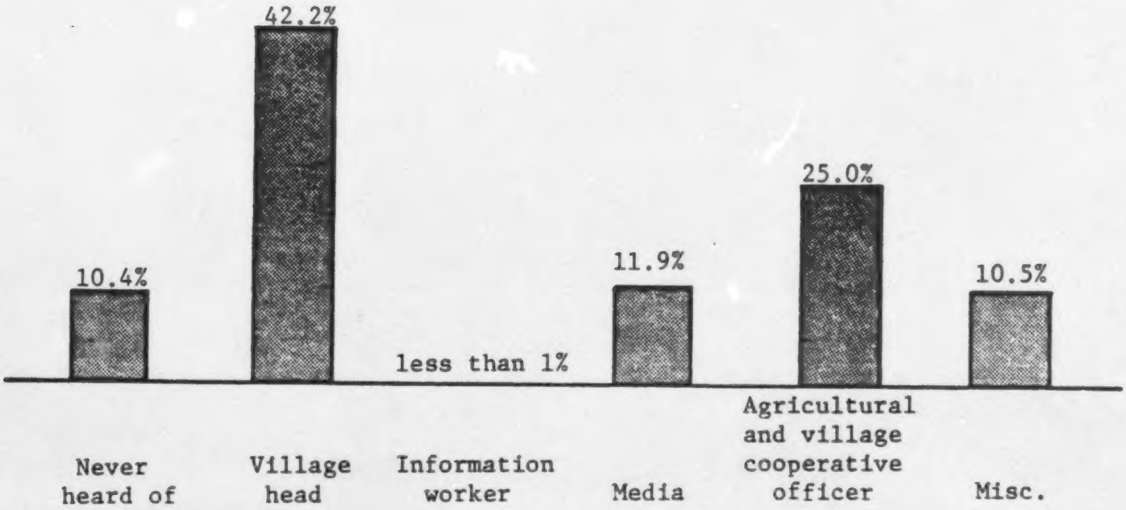


Figure 11.2. Sources of Information about the Agricultural Development Program.

sample. Better educated people were more likely than others to go to the bank and to the media for information. But all the figures are very small.

The Cooperative Movement depended, like several others we have mentioned, on a specialist as well as on the village head and the general information worker. This specialist was the agricultural and village cooperative officer. The specialist and the village head together served about two-thirds of the persons who knew anything about the Cooperative Movement. Figure 11.4 gives a profile of sources.

There were few striking differences in the groups of people who used the different sources within the village. One of the more substantial differences was in religious affiliation. Hindus and Buddhists (among whom agriculture is a major occupation) preferred to draw their information from the agricultural officer; the other three religions, from the village head. This difference was especially large in the case of Christians. Fifty-one percent of them depended on the village head, and only 19 percent on the agricultural specialist. The reason for this is not easily apparent. Perhaps the most striking contrasts were among media users, where heavy dependence on media is strongly correlated with the amount of reading and listening (Table 11.3).

Table 11.3

Media as a Source of Information about the Cooperative Movement

	Media as Chief Source (%)
Newspapers	
Nonreaders	5.6
Readers	19.5
Magazines	
Nonreaders	6.5
Readers	24.0
Radio	
Nonlisteners	1.5
Sometime listeners	9.2
Once a week listeners	12.8
Everyday listeners	24.8

The knowledge of BIPIK, like that of the Small Credit Program, was so scant that it hardly justifies detailed treatment. Less than 9 percent of the respondents had ever heard of BIPIK, which is a program to support the development of small industries. However, there is one interesting question on which BIPIK throws some light: what are the chief sources of information when not much information is flowing into the community? In this case, where less than one person in eleven had any information at all about BIPIK, the chief sources were two, the village head and the media. The village head was mentioned as a source by 4.1 percent of the sample, and the media by 2.3 percent. No other source was cited by as many as 1 percent of the respondents. It seems logical to believe that, when information is very scant, the village head, with his ties to government and his responsibility for the village as a whole, and the media, with their ties to the central sources of policy and knowledge, should be the most likely sources of information. The older persons tended to hear the information from the village head; the better educated, the people in the best jobs (government service), and, of course, the heavier readers and listeners, tended to learn about the new program from the media. Other trends are less clear.

The Savings Movement differed from the other development programs in that the chief information source was media, and the second was the Bank of Indonesia, which had a special responsibility for this program. The profile is given in Figure 11.5. This is one of the few cases where the village head was not the chief informant. It may be that the topic required a greater degree of specialized knowledge than many others, and also that the bank was required to serve as a party to, as well as an informant on, the savings program. Where the trends are clear they are not unlike the ones we have already seen: Older people tended to draw their information from the village head; younger ones from the other two chief sources. Higher economic status, higher paying occupations, and higher education all went with greater dependence on the media. Males were likely to hear about the new program from the media; females, from the bank. Christians were likely to have the bank as their chief source; Muslims, the media. The reasons for the latter differences are not clear, but one thing that is clear is the importance of media sources for persons with higher education and economic status (Table 11.4).

Of all the development programs we are examining, it is only in Family Planning that the special source, the family planning worker, was the chief source of information by a wide margin. This is undoubtedly because of the technical nature of the information and, perhaps, materials to be obtained. Two trends stand out: young people (who doubtless have greater need of this service) were more likely than older ones to get information from the family planning worker, and so also were the better educated people. But the dependence on the specialist was high regardless of economic and occupational status, and rose also with increased media use. Women used the specialist about as frequently as did men. Hindus and Buddhists used the family planning officer (70.9%) to a greater extent than did Christians (54%), Muslims (40.6%), and Confucians (21.6%). One reason for the low use by Confucians may be that only 70 percent of them (as compared, for example, to 97.8 percent of Christians) had ever heard of the program. One reason for the lower figure for Christians may have been the opposition of the Roman Catholic church to tampering with the process of conception and birth. There must have been other reasons we do not know. But it is clear that a program like this requires an information source well grounded in technical knowledge and prepared to furnish

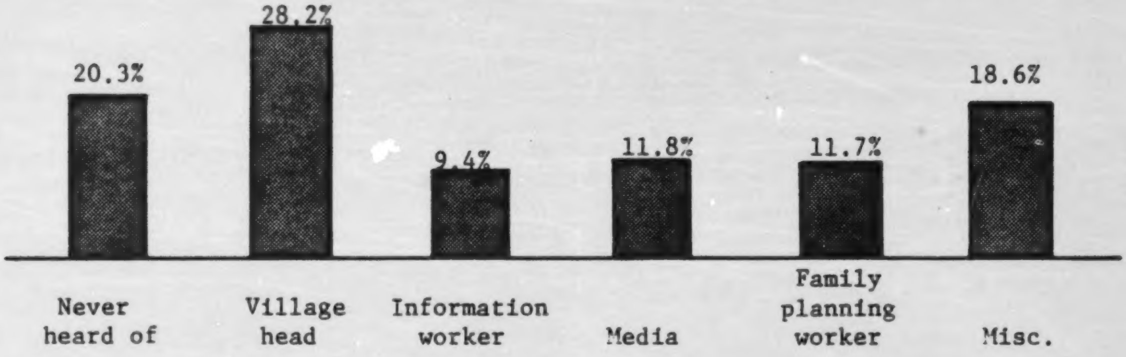


Figure 11.3. Sources of Information about Health Centers.

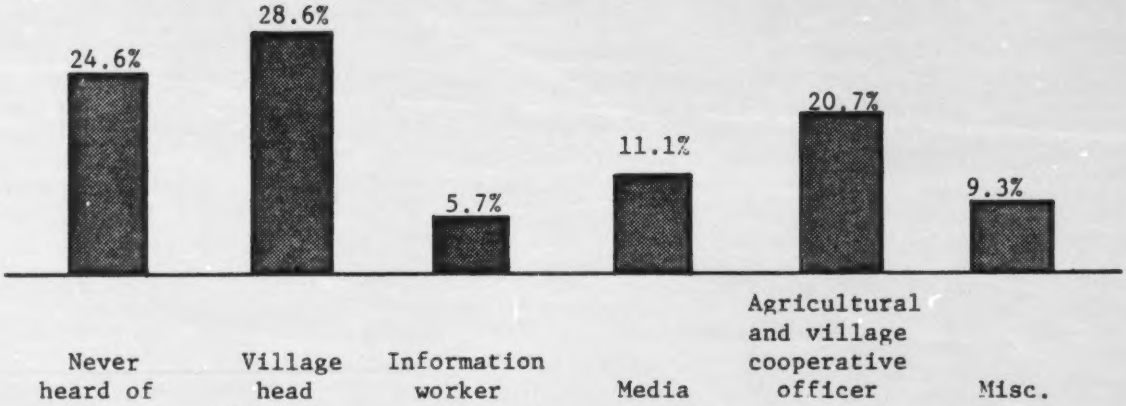


Figure 11.4. Sources of Information about the Cooperative Movement.

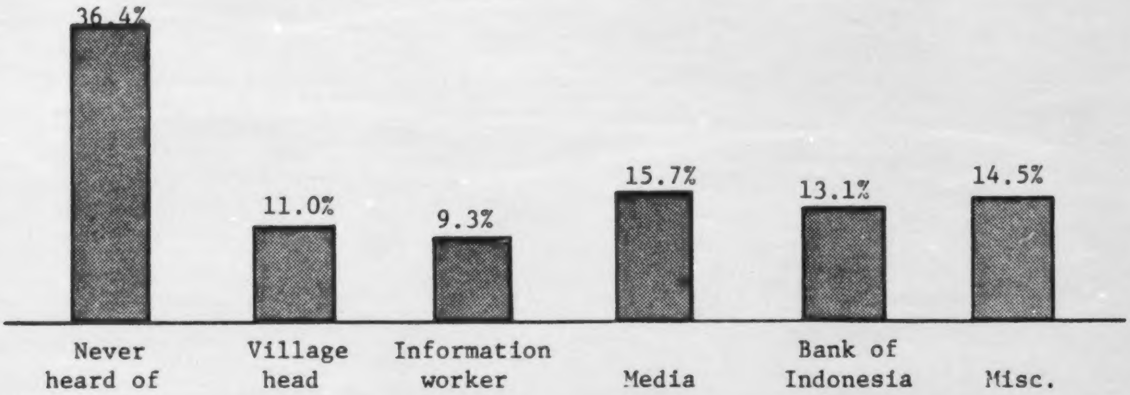


Figure 11.5. Sources of Information about the Savings Movement.

Table 11.4

Use of Media as Source of Information about the Savings Movement, by Economic Status and Education

	Media as Chief Source (%)
Economic Status	
Lower	4.4
Lower-middle	11.6
Middle	14.7
Upper-middle	18.8
Upper	30.0
Education	
No education	5.5
Some primary school	10.2
Primary school	17.0
Junior high school	26.8
Senior high or more	41.6

specialized materials. Figure 11.6 is a profile for sources of information on family planning.

Discussion of the Development Plans: A General Pattern

It is not surprising, as we have indicated earlier in this chapter, that the persons who are most likely to discuss a development program are the same kind as those most likely to have received information on it. A person who has not heard of a program would not be able to discuss it, and, on the other hand, a person who has sought information on a program has already shown an interest in it and is therefore more likely to talk about it.

We do not have multiple regression figures on discussants of a program, but can approximate such figures from the cross-tabulations. As in the case of receiving knowledge about a development program, the two most common predictors of discussing it appear to be more than average education and more than average use of media. This is easy enough to understand: such people have the most

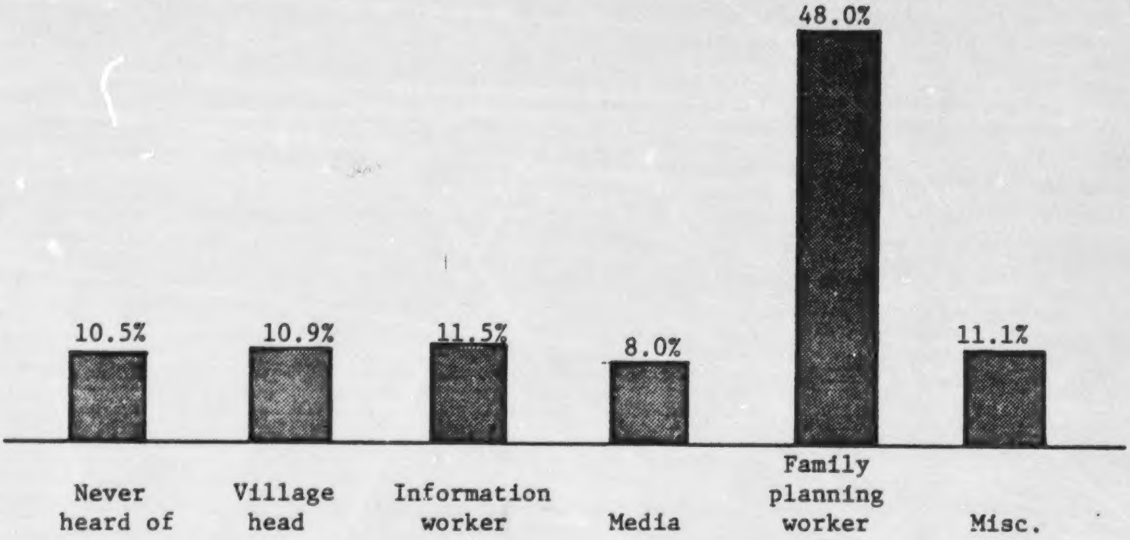


Figure 11.6. Sources of Information about the Family Planning Program.

knowledge about most of the programs, and have learned in school both to seek information and check it with other sources. But there were also two other predictor characteristics that appeared in the discussion patterns of all except one of the development programs. These were occupation and sex. Specifically, persons in government and military service were more likely to discuss these programs than were people in other occupations, and men were more likely to discuss them than were women.

Why should this be? For one thing, because persons in government service are in a position where development is a part of their responsibility, and they have around them more people who are interested in the same topic. The sex difference can be understood in light of the Indonesian culture, which gives men a greater share of public contacts as well as, in many of these cases, a greater responsibility.

The general pattern of discussion of these development programs was then as follows:

- o People who make more use of media were more likely to discuss development programs.
- o People with more than average education were more likely to discuss them.
- o People who were in government and military service were more likely than persons in other occupations to discuss them.
- o Men were more likely than women to discuss them.

There is one more possible addition to that list. In every case for which we have reliable data, the religious group least likely to discuss a given program was the Confucians. In all except two cases, the religious group most likely to discuss them was the Christians. We do not imply that anything in the Confucian or Christian beliefs caused this difference. Rather, it must relate to where the people live, their occupations, and cultural patterns other than religious beliefs. For example, the Chinese are mostly traders, whereas most of the development programs have to do with agricultural production. The Christians, on the average, have more education and make more use of media, and that background would encourage them to discuss the development programs. Finally, the Confucians, for one reason or another, seem less likely to have heard of a given development program and consequently have less information to discuss. These differences must be sorted out and studied further, but suffice it to say that the differences in discussion are large enough to be impressive, as Table 11.5 shows.

With Whom Did They Discuss Programs?

There are three groups of individuals in a community with whom we might expect Indonesian villagers to discuss development programs. These are, first, their families and friends; second, community leaders (most probably, the village head); and third, the officers or workers concerned with a specific program (for example, the family planning officer, the representative of the bank responsible for the Savings Program, or the Agricultural Development

Table 11.5

Confucians and Christians Who Had Never Discussed Development Programs (%)

Program	Confucians	Christians
Presidential Schools	46.2	19.8
Agricultural Development	43.3	18.9
Cooperative Movement	50.9	22.2
BIPIK	26.3	16.7
Health Centers	55.0	19.4
Savings Program	53.8	25.6
Family Planning	35.1	13.9

representative). Other things being equal, we should expect a villager to be most likely to talk about a development program with the people closest to him—his family and friends. Some programs, however, might need to be discussed with specialists, or with the officials in control of materials or resources.

To test out the distribution of discussion among these three groups, let us make the number of persons in the sample who talk about a program chiefly with their family and friends equal to 1.00. Then, if half as many people talk chiefly to community leaders, that could be represented by 0.50, or 50 percent. If one-fourth as many persons discussed the program with the officer in charge, as with their families and friends, that could be represented by 0.25, or 25 percent. This is how Table 11.6 is calculated: in the case of each program, the proportion of respondents discussing it chiefly with the people close to them is represented by 1.00; the proportions preferring to discuss it with each of the other groups is represented by a number that is greater or less than 1.00, according to whether more or fewer persons discuss the program with other groups rather than with their friends and families. This gives us a general picture of where discussion of development programs flowed. The villagers were equally likely to go to their community leaders (1.03), and their families and the other people close to them (1.00), thirdly to the specialist or government representative working on the program (0.79).

There are, of course, differences by programs. People were more likely to discuss agricultural development with the leaders than with the specialists or the people closest to them. In the case of the Village Cooperative Movement, both the leaders and the specialists were more likely to be consulted than friends and families. With regard to BIPIK (where relatively

Table 11.6

Discussion of Development Programs

Program	Discussed with: Friends and Family	Discussed with: Community Leaders	Discussed with: Officer in Charge
Presidential Decree Schools	1.00	0.14	0.68
Agricultural Development	1.00	1.58	0.78
Health Centers	1.00	0.74	0.65
Village Cooperative Movement	1.00	1.97	1.17
BIPIK	1.00	2.00	1.00
Savings Movement	1.00	0.50	0.51
Family Planning	1.00	0.28	0.75
Average	1.00	1.03	0.79

few people either have heard of the program or discuss it), twice as many people talked it over with the leaders as either with the officers in charge or with their families and friends. In the case of family planning, however, where we might expect the specialist to be the main focus of discussion, the subject was apparently sensitive enough so that it is seldom mentioned with the leaders, and only three-quarters as often with the family planning officers as among families and friends.

This is still an incomplete picture of the discussion that goes on in connection with development programs. It tells us where villagers went to discuss a program, but not what kind of villagers chose to discuss it with what other kind. Thus, for example, we found that the more education people have, the more they tended to discuss the Presidential Decree Schools with community leaders, whereas the more use they made of media, the more likely they were to discuss the schools with the specialized worker. This does not mean that as many people discussed the school program with the development worker as with the community leaders, but rather that the effect of heavy media use seems to have been to send more persons to the specialist rather than to the leader, whereas the effect of education seems to be the reverse.

In the case of the Agricultural Development Program, more education and more media use seem to have made for more discussion with everybody. However, contrary to the effect on discussion of school programs, the more contact an individual had with the media, the more likely he or she was to discuss it with the leader rather than the specialist. Persons in government service were also more likely than those in other occupations to talk agricultural development over with the leaders, but the younger a person was, the more likely he or she was to talk with the worker rather than the leader. One can assume that the people in higher positions (government service) were more likely to talk with the informants who were also in higher positions (the community leaders), whereas the young people, not yet in influential positions, found it easier to go to the development workers.

Concerning the Health Centers, more education and more media contact seem to have made for more discussion with everyone, but there were two interesting patterns apart from those: Persons under 40 and those higher on the economic ladder were more likely to discuss this program with the specialist (health or family planning worker) than with the village head or other community leader. The reasons for these trends are not entirely clear.

In discussion of the Village Cooperative Movement, the familiar chorus that goes through this report recurs—more education, more media, more discussion with everyone. But here again we have some special relationships. As we might expect, farmers were especially interested in the topic and more likely than any group except those in government service to discuss it with both leaders and specialist workers. Hindus and Buddhists, mostly engaged in agriculture, were more likely to discuss this matter with the agricultural worker than others; Muslims and Christians were more likely to discuss it with village leaders. Young people, in this case as in several others, were more likely to talk it over with workers than with leaders.

There are no special differences in the pattern for discussion of BIPIK (which gets relatively little discussion anyway), except that the younger groups discussed it more than did the older ones. More education and more media contact both made for more discussion on all fronts.

Of the occupational groups, government servants were most likely to discuss the Savings Program both with leaders and with specialist workers; traders were next in both cases, and farmers a close third. More education made for more discussion with everyone except the leaders, and more media contact, as usual, led to more discussion with everyone.

The 30-39 group was the most likely age group to discuss the Family Planning Program. The younger groups were more likely to discuss the subject with family planning workers rather than with leaders. Government servants discussed it more than other occupational groups; and the more people used the media, the more they discussed it. Men discussed the subject more with friends and family, but women discussed it more with family planning workers.

It is difficult to summarize a large quantity of data in a few paragraphs. To make the pattern a bit easier to understand, we have put it in the form of a chart (Table 11.7). When the words "media" or "education" appear opposite the name of a program and under one of the chief partners in discussion (family and friends, community leaders, or workers in charge) it means that discussion of that program with that particular partner increased steadily with more use of media or more education. When the names of occupations like "farmers" or "government" appear, it means that persons who are in farming or in government service discussed the particular program more often than did members of other occupations with the particular partner in discussion. "Males" or "females" means that males discussed the program with that particular partner oftener than did females, or vice versa. Ages are given by age-groups, and religious groups by name. When an age or a religion appears, it means that the group mentioned discussed the program with that partner more often than did other age or religious groups. Thus, for example, one reads the table as saying that discussion of agricultural development with family and friends increases with education and is larger among Hindus and Buddhists (most of whom are farmers) than among other religious groups.

Where Were the Programs Discussed?

To get a general idea where most of the discussion of development programs went on, we constructed an index similar to the one just presented to summarize with whom the programs were discussed. In this case, however, we let discussion at home (house or yard) equal 1.00, and compared the proportion of people who discussed it in other places. The programs were grouped under four titles: Family Planning, Agricultural Development, Community Development, and Community Education. Perhaps the most interesting finding from this exercise is that between five and six times as much discussion took place in the office or house of the village head as at any other place where we expected a considerable amount of talk about development programs might take place: home, market and coffee shop, workplace, clinic, or mosque (Table 11.8).

So far as these groupings represent all the development programs, then, the great bulk of discussion took place in the office or house of the village head; the mosque and the home came next. The place of work, the clinic, and the market and coffee shop were the scenes of less of this kind of discussion than we might expect—significantly less than at home or at the mosque, and very much less than in the quarters of the village head.

Who discussed development in these different settings? Let us go through the pattern, program by program.

In the case of family planning, the younger a person was, the more likely he or she was to discuss the program at the clinic; the older he or she was, the more likely to discuss it in the village head's quarters. More education, more use of mass media, high economic status, and employment in government and military service all went with discussion at the clinic rather than elsewhere. More than average education also led to a greater likelihood of discussing family planning at work and less likelihood of talking it over in the office or home of the village head. More than average use of media also made it more likely that the subject would be discussed at work. And females apparently discussed it less than did males at every location except the clinic.

All age groups, and in fact most groups of other kinds, tended to discuss agricultural development most in the quarters of the village head. The more use one made of mass media, for example, the more likely one was to discuss it in the head's home or office. Farmers were most likely to discuss the topic at home, but away from home their chief discussion places were the market and the head's house or office. Even the government and military employees were most likely to discuss agriculture development in the head's quarters. And men were

Table 11.7

Factors that Increase the Discussion of Development Programs with Family and Friends, Community Leaders, and Workers in Charge

Program	Family and Friends	Community Leaders	Workers in Charge
Presidential Decree Schools	Media	Education	Media
Agricultural Development	Education Hindus-Buddhists	Media Government Males Christians	Education Males Hindus-Buddhists
Health Centers	Education Media Males Government	Education Media Males Government	Education Media Under 40 High economic status Females Government
Village Cooperative Movement	Media Education Government Males	Media Education Farmers Government Males	Media Education Farmers Government Hindus-Buddhists Under 40
BIPIK	Media Education	Media Education	Media Education
Savings Movement	Education Media Males Under 50	Media Males	Education Media Males
Family Planning	30-39 Government Education Media Christians Males	30-39 Government Islam Christians	15-29 Government Education Media Hindus-Buddhists Females

Table 11.8

Place of Discussion of Development Programs
(House or Yard = 1.00)

Program	House or Yard	Market Coffee Shop	Home or Office of Village Head	Work-Place	Clinic	Mosque
Family Planning	1.00	0.14	0.68	0.13	0.49	0.08
Agricultural Development	1.00	0.43	4.67	0.79	0.36	0.41
Community Development	1.00	0.48	10.46	0.65		1.39
Community Education	1.00	0.41	6.68	0.83		2.20
Average	1.00	0.37	5.62	0.60	0.42	1.02

more likely than women to discuss it everywhere except at home. There the women discussed it slightly more than the men.

Those with more education and more use of media, tended toward more discussion of community development in public rather than merely at home. As before, the village head's house and office were the chief places for discussion. More than average education seems also to go with more discussion at work, and more than average magazine reading seems to lead to more than average discussion both in the mosque and at home. Government employees were the occupational group that made most use of the village head's house and office for discussion, farmers were next, and males discussed it more than females did at all these public locations. Females discussed it at home more than males.

Discussion of community education seems to have been more widely spread around than that of other programs. Older people were more likely to talk about it at the mosque; younger ones, at the village head's quarters and at work. People in higher economic brackets tended to discuss the program less at the mosque, and generally more elsewhere. Persons with more than average education, in the case of this program as well as others, tended to talk about it in a great variety of places, but especially in the village head's house or office, at work, or at home. The effect of more than average use of media seems to have been split by media. Heavy listeners to radio were especially likely to discuss community education in the village head's home or office, or at the market. Heavy users of print media, on the other hand, were less likely to discuss the program at the mosque than in numerous other settings, but in general the more they read, the more likely they were to discuss it elsewhere. Christians were especially likely to discuss it in the office or home of the village head. And, as before, men were more likely than women to discuss it in public places, and women more likely than men to discuss it at home.

Let us now restate this pattern, in a bit more detail, in the kind of chart presented in the previous section (Table 11.9).

Who Are the Opinion Leaders?

One way to identify opinion leaders is to find out which persons in a community are most likely to be asked for advice and information. With that purpose in mind we asked every member of our sample, "Did anyone ever ask you any questions or ask you for information during the last three months?" And, "If so, how many times?"

Fifty-nine percent (1,441 out of the total 2,245) said they had been asked no such questions. The remaining 41 percent (804) reported that they had been asked a total of 2,924 questions, an average of 3.6 each.

Since it is difficult to recall precisely how many questions one has been asked over a time as long as three months, and whether a particular question was asked during the period specified, we feel that respondents were more likely to remember accurately whether they had been asked any questions than just how many they were asked. Therefore, we are going to present in the following tables only two sets of figures: the proportion of a given group that said they had been asked any questions, and the proportion that said they have been asked seven or more such questions during the three preceding months. The figure on persons who had been asked any questions is probably more reliable than the other, but the percentage who said they had been asked seven or more gives us at least a rough estimate of how many have been asked a great many questions. We can assume that the persons who had been asked for any advice or information at all were more likely to be opinion leaders than those who have been asked for no such help, and that, if the figures are reliable, those who had been asked a great many questions were most likely of all to be serving as opinion leaders in their communities.

Figure 11.7 shows these two groups of suspected opinion leaders as they divide by age.

These are not significant differences, and lead us to suspect, as other studies have also found, that opinion leaders appear in all age groups, just as they appear in different social groups. We suspect young people tend to ask advice from people near their own age if they think they can get it; old people would rather go to people nearer their own age than to young people, and so forth.

Figure 11.8 shows the pattern of opinion leadership by economic groups. Here the pattern is very clear. Other things being equal, an Indonesian villager was much more likely to take his questions and his needs for advice to someone who had demonstrated the success and power that go with higher economic status.

Table 11.9

Factors That Increase the Discussion of Development Programs in Six Settings

	Location of Discussion					
Program	Home	Coffee Shop Market	Village Head's House, Office	Work	Clinic	Mosque
Family Planning	30-50 age Traders, farmers Hindus-Buddhists Christians More education Males	Workers Confucians Males	30 or over Lower middle economic Farmers Middle education More media Christians	Higher economic Government	15-29 age Higher economic More education More media Hindus-Buddhists Females	Lower middle economic No education Little media Muslims
Agricultural Development	Middle economic Farmers Below average education Hindus-Buddhists	Over 30 Workers Hindus-Buddhists Males	Middle age Farmers More education More media Muslims Christians Males	Middle and higher economic Government More education More media Hindus-Buddhists Males		Muslims Males
Community Development	30-39 Upper economic More education Government Christians Females	Upper middle economic Workers Less education Confucians Males	Under 50 Middle and higher economic Government More education More media Hindus-Buddhists Christians Males	Under 50 Upper economic Government More education More media Males		Lower economic Muslims Males
Community Education	30-50 age Government More education More media	Upper middle economic Workers Traders More media Males	Under 50 Higher economic Government More education More media Christians Males			Over 50 Lower economic Farmers Unemployed Little education Little media Muslims Males

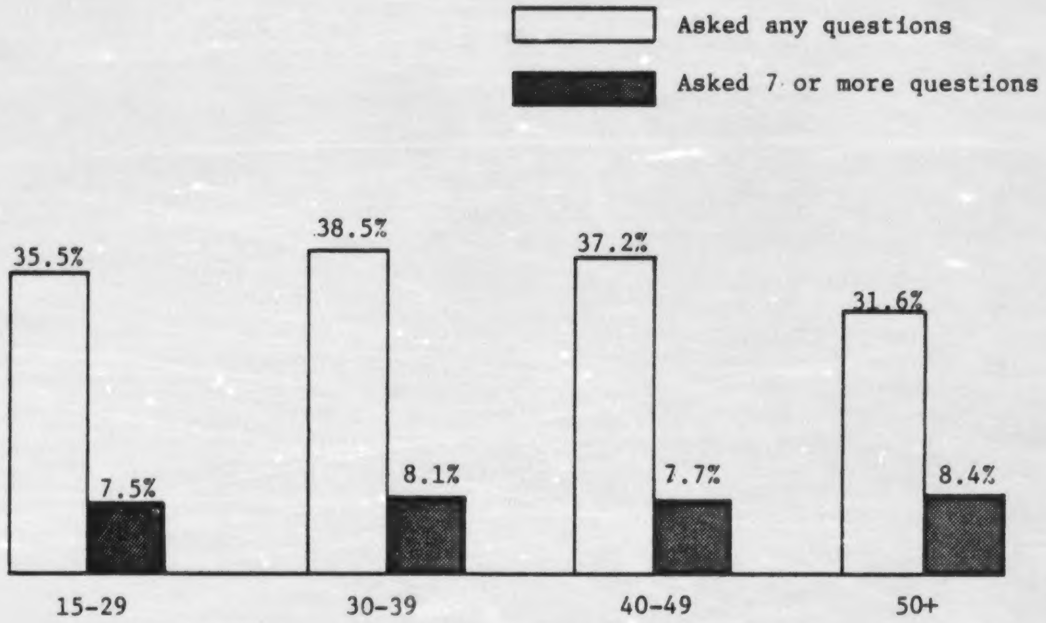


Figure 11.7. Percentage of Each Age Group Asked for Information.

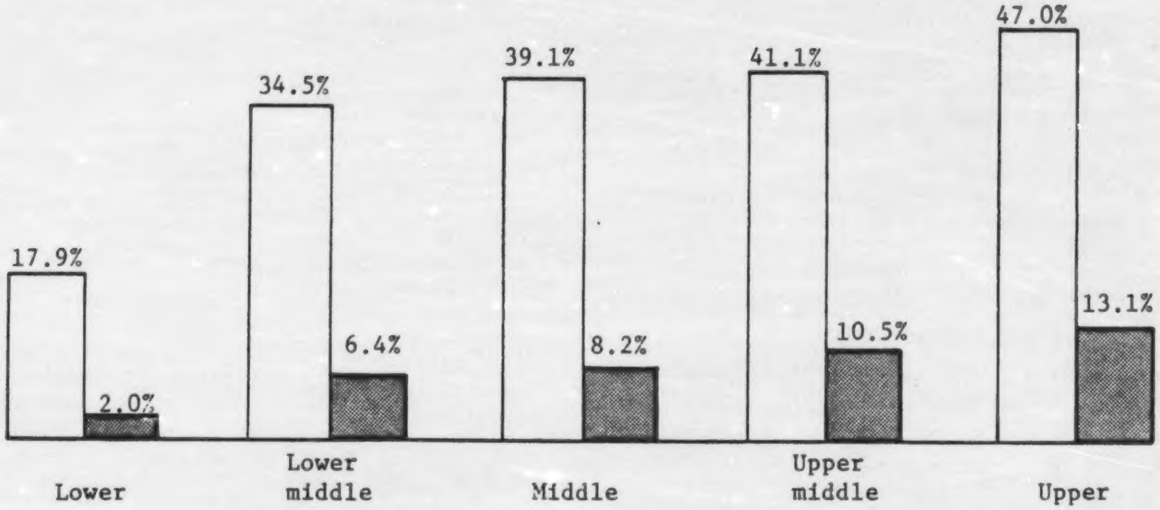


Figure 11.8. Percentage Asked for Information in Each Economic Group.

Much the same pattern is seen also in education, as Figure 11.9 shows. The importance of education is even more pronounced. It is apparent that few opinion leaders came out of the uneducated groups. The percentage rose steadily with the amount of education, and peaked sharply with people who have gone at least through high school. Whatever it is that the average person was seeking with his or her questions, he or she seemed to feel that education contributes to it.

The pattern by occupation is somewhat similar but not so regular (Figure 11.10). The most interesting feature of this pattern is that opinion leadership appears to have been concentrated in those persons who were in the government civil or military service. If one asks why this was so, one can assume that more education is required for government jobs than for many others, that these jobs bring higher average income than do many others, that government employees are in a position to know a great deal about development programs, and in many cases, are able to do something about them. Furthermore, the majority of these government employees were men, and questions were more likely to go to men than to women (Figure 11.11).

The pattern of opinion leadership by religious affiliation is a bit harder to understand, but there is no doubt that the proportion of opinion leadership is relatively greater among the Christians than in other groups (Figure 11.12). It would seem reasonable to expect that a person seeking advice would be more likely to go to someone who lives in the same part of the country and, if possible, is a member of the same religion. Since the religions typically group together (for example, the majority of Hindus and Buddhists live in Bali), the question then arises, why were so many more questions asked of Christians than of members of other faiths? Is it that Christians, being on the average more highly educated than the other groups, were more likely to seek informed help with their questions? Or that Christians, having more education and typically making more use of the media than did the other groups, were in a better position to advise? Whatever the reason, it is evident not only that more questions were asked of this group than of others, but also that the number of persons within this group who were asked a large number of questions was very much larger than in the case of the other three religions.

Finally, let us look at the relation of media use to opinion leadership. Figure 11.13 gives the data for radio, Figure 11.14 for newspaper reading, Figure 11.15 for magazine reading, and Figure 11.16 for television viewing for the small part of the country where television was already available. It is clear that the more use an individual makes of media, the more likely he or she was to be asked the kinds of questions that come to an opinion leader.

The portrait of an opinion leader that emerges may be summed up this way: He or she may have been in any age group from the youngest to the oldest. But, other things being equal, the more education he or she had, the higher his or her economic bracket, the heavier use he or she made of media, the more likely he or she was to be an opinion leader. He was more likely to be an opinion leader than she—that is, males were more likely than females to fit this category. Individuals who were in government or military employment, and who were Christians were more likely than members of other occupations or other religious groups, to be opinion leaders.

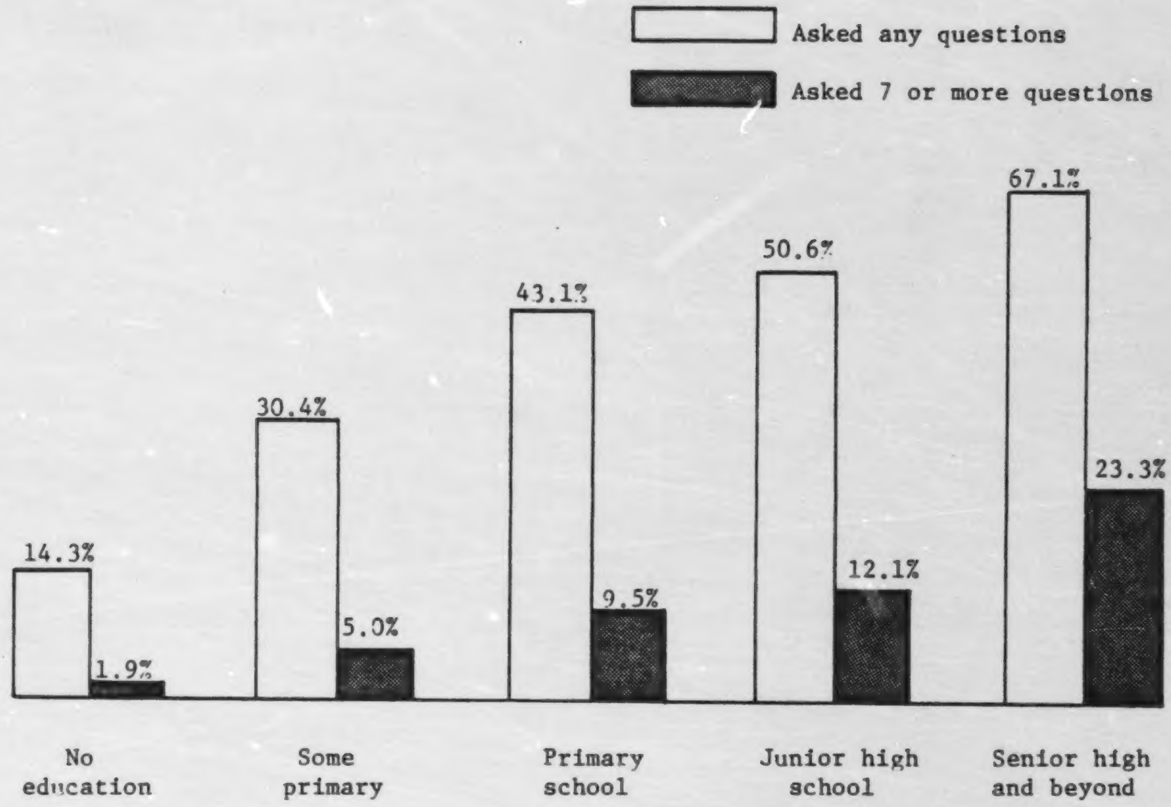


Figure 11.9. Percentage of Each Educational Group Asked for Information.

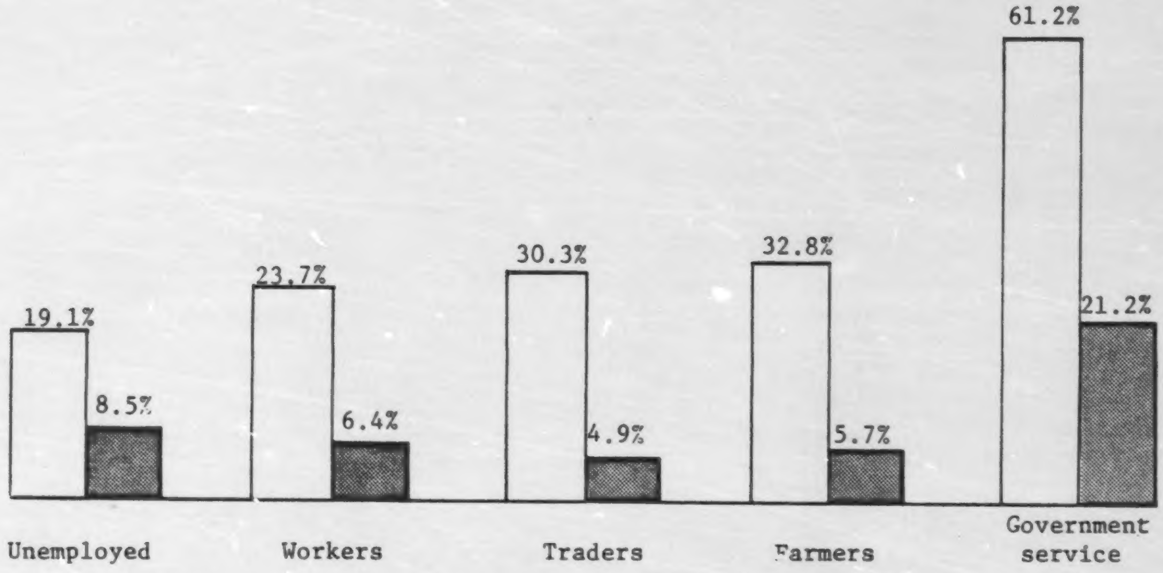


Figure 11.10. Percentage of Each Occupational Group Asked for Information.

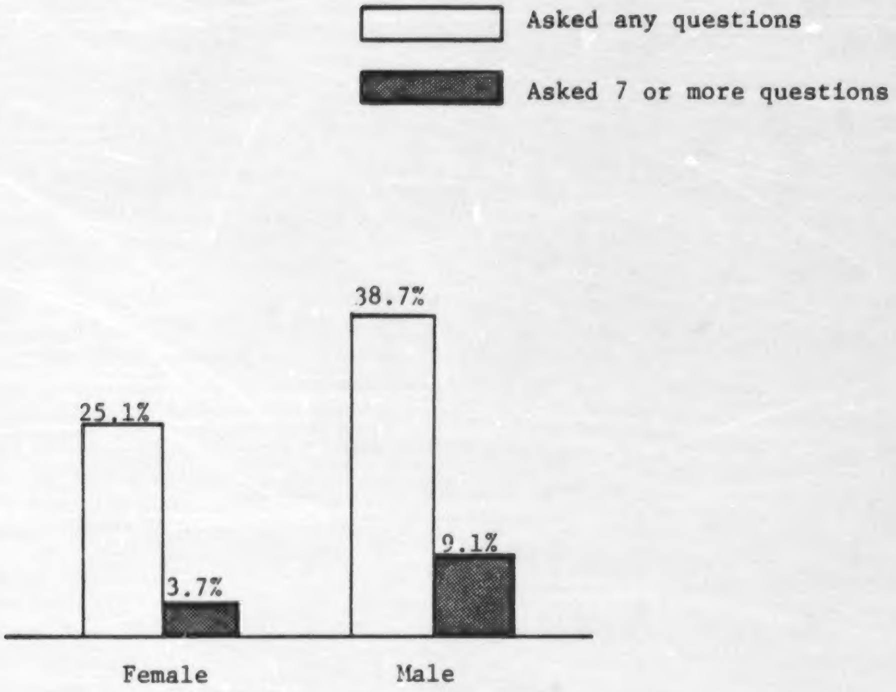


Figure 11.11. Percentage of Women and Men Asked for Information.

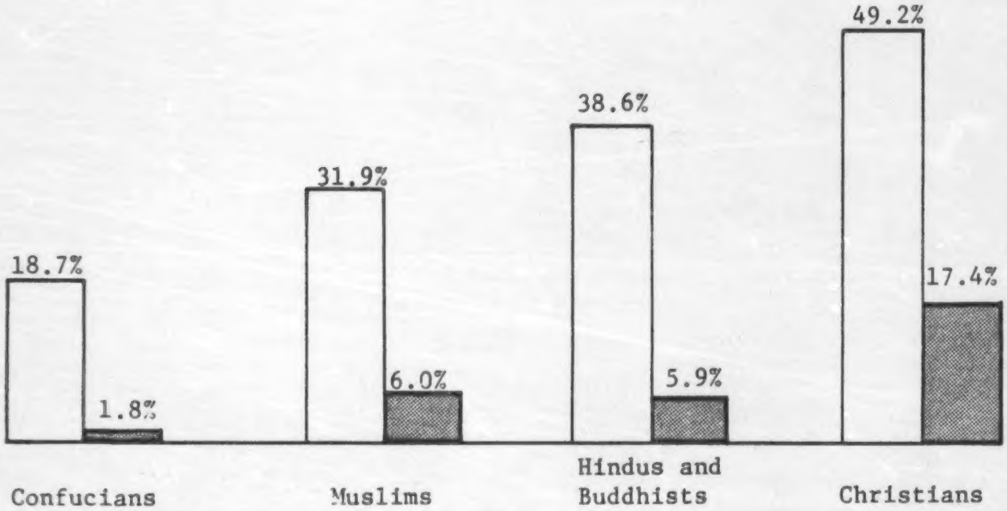


Figure 11.12. Percentage of Each Religion Asked for Information.

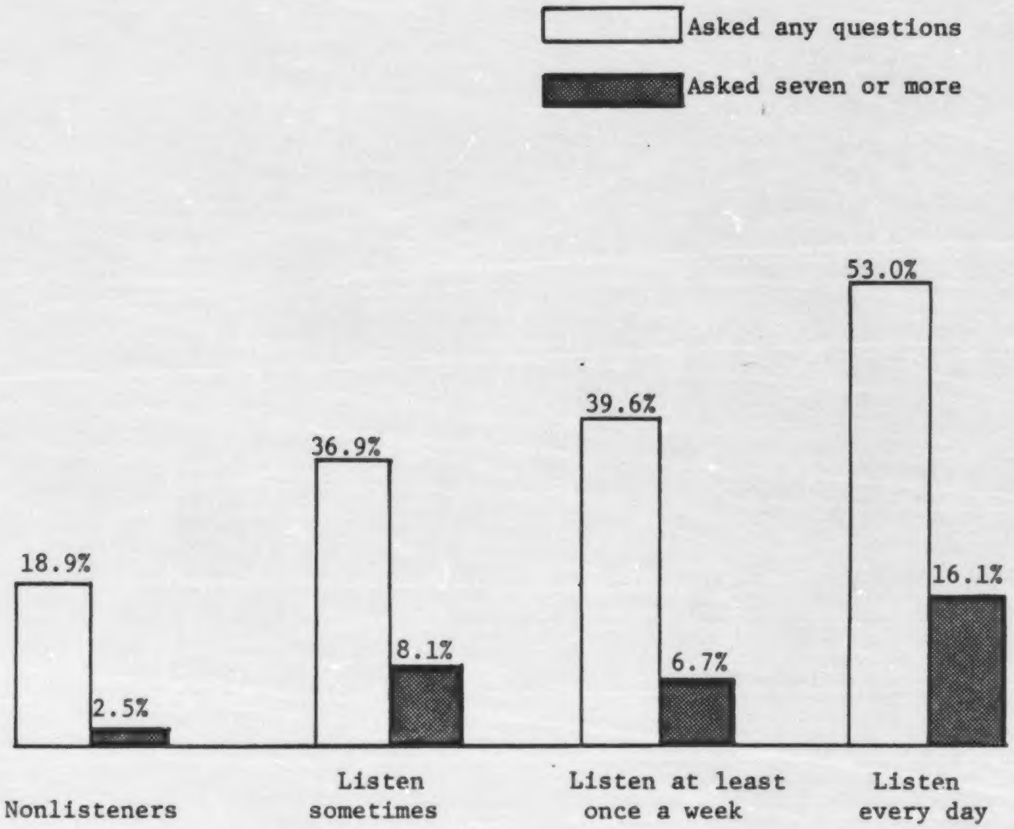


Figure 11.13. Percentage Asked for Information by Frequency of Radio Listening

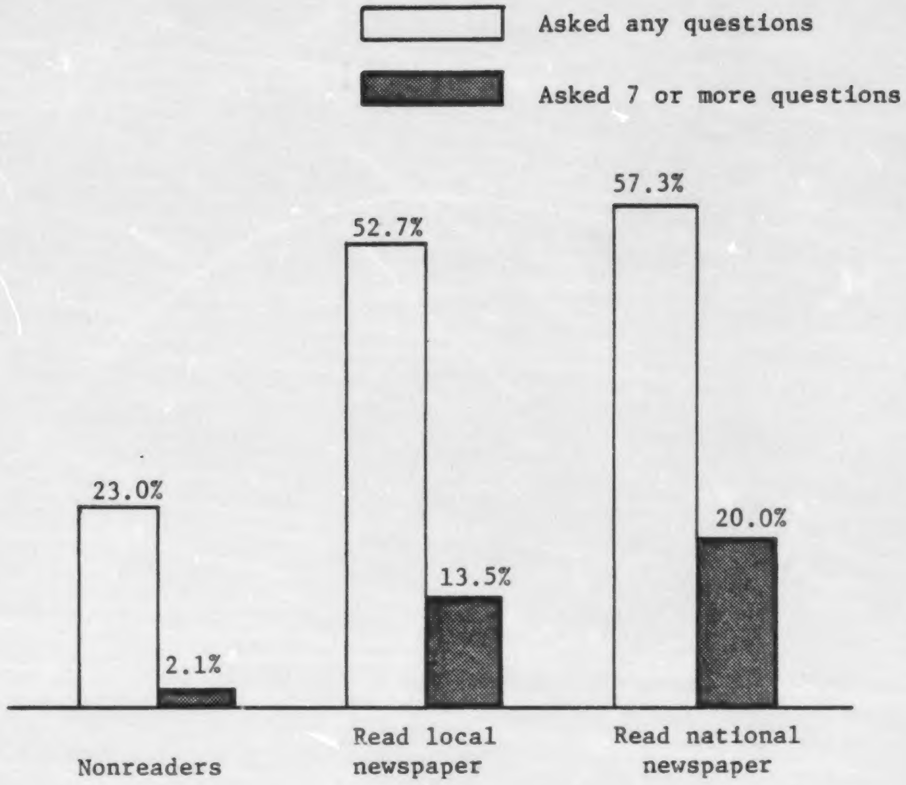


Figure 11.14. Percentage Asked for Information, by Newspaper Use.

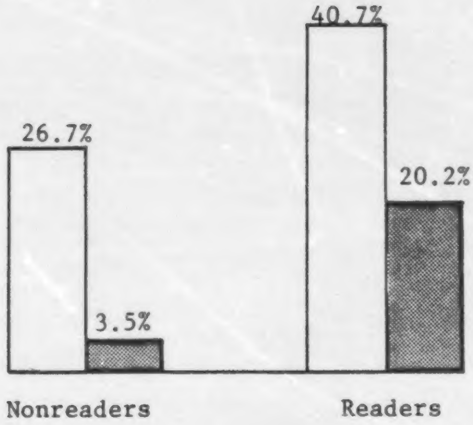


Figure 11.15 Percentage Asked for Information, by Magazine Use.

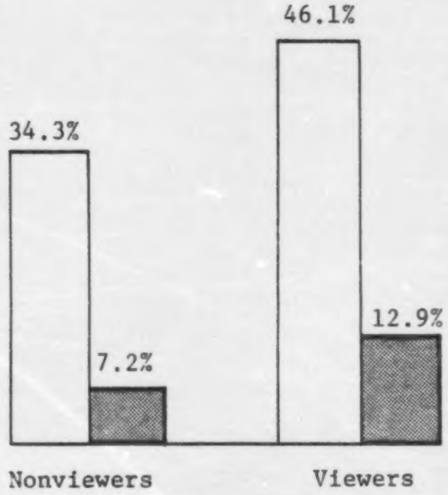


Figure 11.16. Percentage Asked for Information, by Television Viewing.

What Kind of Advice Is Asked of Whom?

Thus we see that opinion leaders in these communities tended to follow a certain social and economic profile. We also know that a great many kinds of information and advice were asked of these opinion leaders. Out of 2,924 examples of questions reported by members of our sample, we were able to identify the following distribution by topics (Table 11.10). It would be most unlikely if all these types of questions were asked of the same opinion leaders. Therefore, it is of interest to find out what kinds of advice and information were asked of what kinds of opinion leaders?

Table 11.10

Topics of Questions Asked

Topic	N	Percentage
BIMAS	651	22.3
Community Development	517	17.7
Family Matters	398	13.6
Public Education	292	10.0
Religious Matters	238	8.0
Family Planning	200	6.8
General Knowledge	167	5.7
Financial Matters	168	5.7
Social Custom	155	5.3
Miscellaneous	141	4.8

We find some consistent relationships. Suppose that we divide the questions into two groups: some which are clearly public matters (public education, general knowledge, and community development) and some which are clearly private (religious matters and family matters). All these showed a consistent relationship to type of opinion leader, as we shall see in a moment. However, that leaves out four topics—BIMAS (agricultural development), social customs, financial matters, and family planning—which did not show a consistent relationship. We shall explain a little later as to why they did not show the same degree of consistency of the others. But for the moment, let us take the two groups of public and private topics, and relate them to the measures we have.

The measures also are of two types. The majority of them are ordinal, meaning that they can be expressed numerically and in terms of a scale from low to high. These are, for example, income, amount of radio listening, age, and so forth. A few others, however, are nominal (occupation, religion, sex), meaning that they describe a person but not numerically. That is, a person is a farmer or a trader; a male or a female; a Buddhist or a Muslim. These are important distinctions, but they cannot be treated in terms of more or less. Let us put the nominal variables aside for a moment, and consider simply the relationship of the ordinal measures to the public and the private measures (Figures 11.17a, 11.17b, 11.17c, 11.18a, and 11.18b).

These relationships were generally consistent: for advice on clearly public questions, the Indonesians in this sample tended to go to persons who were better educated, belonged in higher economic brackets, made more use of media than others, and were relatively young—at least below 40. For advice on clearly private matters, they tended to go to persons who were in the lower socioeconomic brackets, made less use of media than the others, and were older—at least 40 or over.

But that leaves us the four topic areas that do not exhibit a consistent relationship to types of opinion leader. Family planning, for example, sent persons to advisers who were better educated and younger, but also lower on the economic scale and nonreaders of newspapers (the other two media measures showed no obvious trend). Financial problems sent persons to advisers who had less than average education, had higher incomes than average, and tended not to read magazines (radio, newspapers, and age show no measurable trend). Custom questions showed no clear trend whatsoever. Our hypothesis is, with regard to these three topics, that each of them has certain public and certain private aspects (family planning, for example, may be either personal advice or policy advice), and therefore sometimes sent persons to the type of advisers who help them with public questions, and sometimes to those who help with private questions. But what about BIMAS? Persons with questions about BIMAS tended to go to advisers who had more education, who had less than average income, did no newspaper reading, and were in younger age groups. Radio listening and magazine reading showed no clear trend. In part, therefore, the persons in our sample seemed to regard BIMAS as partly a public topic and partly a private topic. Some of them went to the kinds of people who can advise them on one kind of topic, some to those who helped with the other. Why this should have been, we do not know; obviously it would be helpful to find out just how Indonesian villagers feel about the BIMAS program.

Thus far we have said nothing about the nominal variables. Table 11.11 lists the type of adviser this sample was most likely to go to for different kinds of advice. Some of these are easier to understand than others. It is not surprising that people are more likely to go to females for advice on family planning and on private questions. It is also not surprising that people should go to traders and to Confucians (most of whom are traders), for advice on financial matters, to farmers for advice on a rural development problem, to the relatively highly educated members of the government service and the Christian group for questions of general knowledge. But not all the others are that clear.

Key for Figures 11.17 and 11.18

Education
1 = No education
2 = Some primary school
3 = Primary school
4 = Junior high school
5 = Senior high school and more

Income
6 = Lower income
7 = Lower-middle income
8 = Middle income
9 = Upper-middle income
10 = Upper income

Newspaper reading
11 = Nonreader
12 = Reader of local newspaper
13 = Reader of national newspaper

Radio listening
14 = Nonlistener
15 = Listen sometimes
16 = Listen at least once a week
17 = Listen every day

Magazine reading
18 = Nonreaders
19 = Readers

Age group
20 = 15-29
21 = 30-39
22 = 40-49
23 = 50 and over

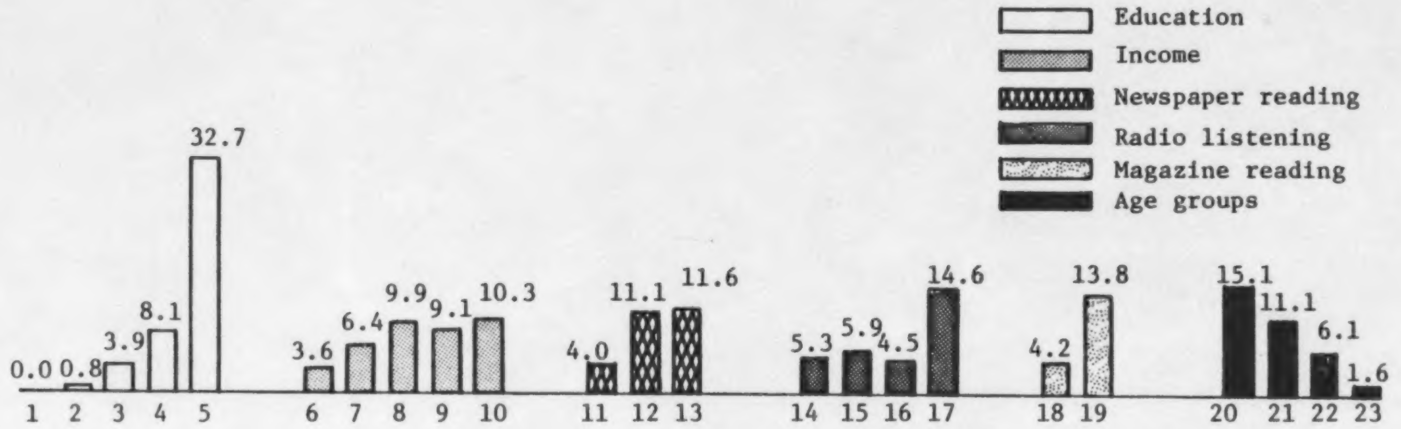


Figure 11.17a. Questions about Public Education

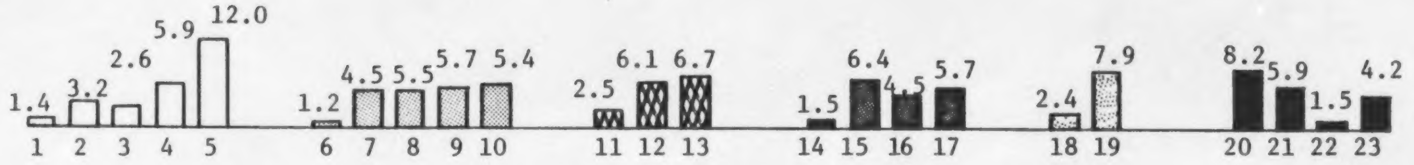


Figure 11.17b. Questions about General Knowledge

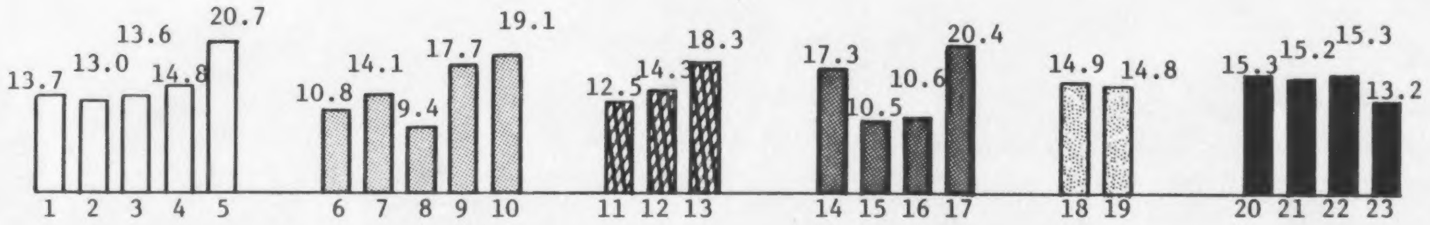


Figure 11.17c. Questions about Community Development

Figure 11.17. Percentage of Those Asked about Public Matters, by Education, Income, Media Usage, and Age

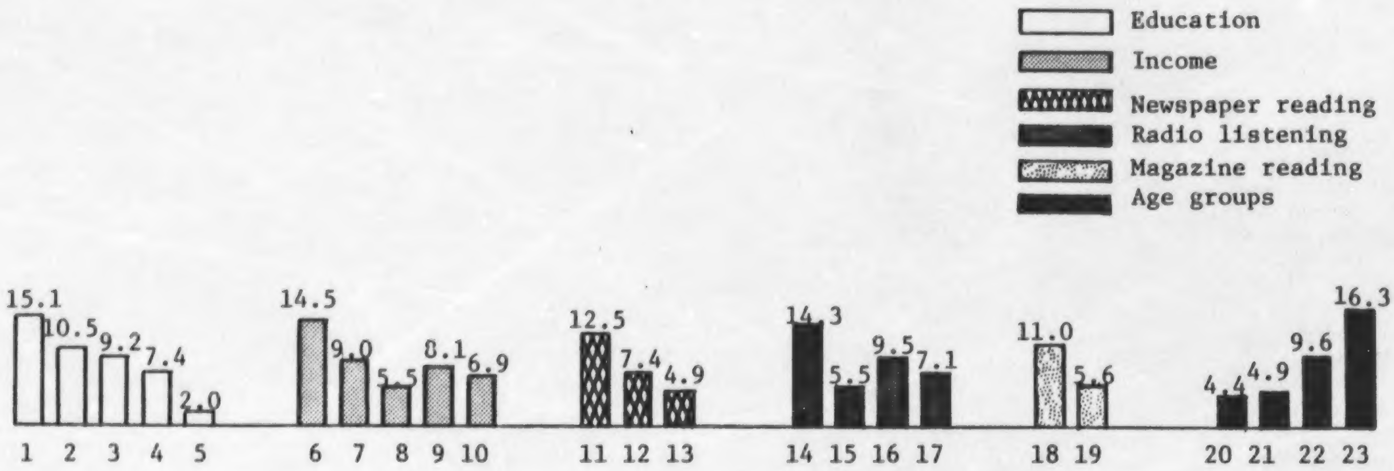


Figure 11.18a. Questions about Religious Matters

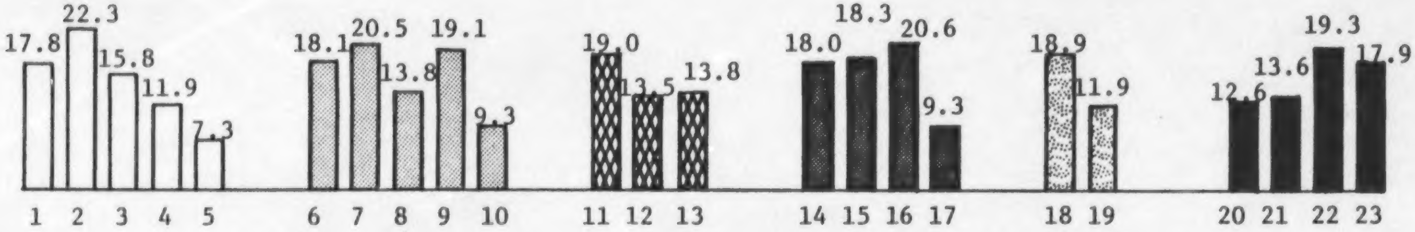


Figure 11.18b. Questions about Family Matters

Figure 11.18. Percentage of Those Asked about Private Matters, by Education, Income, Media Usage, and Age

Table 11.11

Types of Adviser Sought for Public and Private Questions (Occupation, Religion, and Sex)

Topic	Occupation	Religion	Sex
Public questions			
Public education	Farmers	Islam	Male
General knowledge	Government Service	Christians	Male
Community development	Government Service	Confucians	Male
Private questions			
Religious matters	Traders	Islam	No clear trend
Family matters	Workers	Christians	No clear trend
Other questions			
BIMAS	Farmers	Islam	Male
Family planning	Farmers	Hindus	Female
Financial	Traders	Confucians	Male
Custom	No clear trend	No clear trend	Male

In general, then, we can say that the people in this Indonesian sample tended to go to better educated opinion leaders, who were in higher economic brackets, made more use of media, were relatively young, and were male for advice and information on clearly public questions. They tended to go to people with less than average education, who had less than average income, who made relatively little use of media, who were in the older age brackets, and were as likely to be female as male for advice on clearly private matters. The other topics we asked about seemed to have both public and private aspects, and also to call in some cases for specific occupational experience. Thus it is not as easy, from the information we have, to predict for them the characteristics of the opinion leaders who people will seek out.

Summary

If we imagine an "average" or composite program embodying the characteristics of the eight principal Indonesian development programs we are examining, then we can say that 63 percent of the members of this sample had heard of the average program. Of those who had heard of it, about 70 percent had discussed the program with others.

The chief predictors of knowing about the development programs are, with few exceptions, education and media use. In more detail, those who hear of a given program are likely to be persons

- under 40, rather than older.
- from the more affluent economic groups.
- with more than average education.
- who make more than average use of radio, newspapers, and magazines.
- in the higher paying occupations, and especially in government service.
- men, rather than women.

Also, they are likely to be from the groups a program is designed particularly to serve—for example, farmers in the case of an Agricultural Development Program.

The best predictors of those who will discuss a program are also education and media use, but occupation (specially, government service) and sex (male) are also good predictors. The religious group least likely to discuss a development program is the Confucians; most likely to discuss it, Christians.

With whom did they discuss programs? Equally likely with community leaders and family and friends, and next with the officers in charge of the program. The ratio of amount of discussion is about 10 with community leaders, 10 for friends and family, to 8 for officers in the program. Although the general pattern of more education and more media use to more discussion applies to most of the individual programs, there are interesting and significant differences between programs in the proportion of people who prefer to go to the specialist or the leaders or their friends and families.

Where were the programs discussed? Most often—five or six times as often as anywhere else—the discussion took place in the office or home of the village head. Who discussed programs in various places? This varied greatly by programs, and depended on characteristics like age, education, economic status, occupation, and religion.

Who were the opinion leaders? We tried to get more information on this by finding who in the community was most likely to be asked for information and advice. Forty-one percent of the persons in these communities said they had been asked such questions in the last three months—an average of 3.6 questions each. A little less than one-third of these said they had been asked at least seven questions each. It is clear that there were opinion leaders in each age group and doubtless in each religious and occupational group also. But certain consistent relationships stand out. People were more likely to go for information and advice on public questions (such as public education, general knowledge, and community development) to opinion leaders who had more than average education, were in higher economic brackets, read newspapers and magazines, listened to more than an average amount of radio, were males, and in the younger age groups. On private questions (such as religious and family matters), they were more likely to go for opinion leadership to persons who were not highly educated, not in the high economic brackets, did not read newspapers or magazines, listened to less than an average amount of radio, and were older than 40. On these private matters their opinion leaders were as likely to be female as male. Other topical areas (such as family planning, social custom, financial matters, and BIMAS) seem to have had some private and some public characteristics, and therefore show no such clear trend in opinion leadership as described above, but nevertheless have certain consistencies of their own. For example, for financial advice people were likely to go to traders and to Confucians (many of whom were traders). For family planning advice (more likely to be sought by women than men) they were more likely to go to female than male advisers. On matters of social custom, a person was likely to consult a member of his religious group or his family.

Chapter 12: CONCLUSION

The general impression we gain from the survey is that of a rural society in transition from the traditional life of the past to the social and economic development of the future. Education is already becoming popular—only one-fifth of the respondents surveyed did not have any schooling. Even though the standard of living is not high by Western standards, most of the labor force in the rural regions we surveyed is gainfully employed. Many of the peasant homes have such items as sewing machines, bicycles, and even motorcycles. The majority of the people are in farming, as one would expect, but new agricultural technology is already being introduced and rather extensively adopted.

One of the most interesting findings is that the survey results seem to puncture the myth of the traditional peasants who are content with what little they have and are reluctant to change their way of life. As far as the rural Indonesian population surveyed is concerned, nothing could be further from the truth. We found that the villagers were eager to improve their livelihood. They considered hard work, not luck, to be the major reason for success. Most of them were dissatisfied with their low level of education, and they had a common desire for their children to have more schooling. Interestingly, we found little discrimination against daughters in this regard—the levels of education desired for sons and daughters were about the same. In general, the villagers desired their children to take up an occupation other than farming. Government work and other white-collar jobs seemed to be particularly appealing to them. These widespread rising aspirations are a challenge to government development efforts, and deserve careful attention.

On the other hand, the villagers still seemed to lack the ability to make the best use of their financial resources. Although the government has had a program of rural small credit, it was apparently not widely known at the time the survey was taken. Whether it was due to habit or unfamiliarity with government procedures, most village people still went to their friends and neighbors for credit when there was a need. And this need, when it arose, was more often for family expenses than for investment.

A highly encouraging sign in these villages was the adoption of modern health practices. Boiling water for drinking was almost universal. If someone was sick, most either saw a doctor or went to a nearby clinic. We also found that the role of the traditional medicine man was declining.

According to the survey, information about government development programs was reaching the villages from various sources, the most important of which was still the village chief. Several rural development programs were well known to many villagers, who apparently took an interest in discussing them with friends, their village chief, and neighbors. Knowledge about family planning was fairly prevalent, but the level of actual practice was low, particularly among men.

There was a moderately high degree of participation in community affairs, as indicated by membership in various kinds of local organizations. About one-third of the families surveyed had members in organizations that are close to the village's social and economic life, such as the village social unit and the BIMAS intensive agricultural development organization. Less than 5 percent of the surveyed families had members in others, such as the Red Cross, radio listening groups, and the Health Center.

There were signs of improving ethnic relations. While inter-ethnic marriages were practically nonexistent in the last generation, such bonds existed among about 10 percent of the respondents surveyed. The national language, Bahasa Indonesia, was found to be highly popular, and its widespread use is expected to contribute to further integration among the nation's many ethnic groups.

The presence of mass media, particularly radio, was clearly evident in all the villages. However, the media appeared to be functional in bringing news and entertainment to the villages more than in supplying specific information. This was probably due to the content of the media, which must serve a mass audience. When the villages felt a need for specific information, they were more likely to turn to knowledgeable specialists in their neighborhood, such as the village chief, development agent, or health officer, depending on the nature of the information sought.

Although the villagers were exposed to programs on foreign radio broadcasting stations and saw foreign films once in a while, we do not get the impression that these were their favorites. In fact very few respondents said they preferred American movies. For the rural audience in our survey, Indonesian movies were the most popular choices. For many villagers, programs from their own culture were still highly preferred. These findings make one wonder whether "cultural imperialism" is largely an urban phenomenon.

Our survey has found that certain respondents showed a consistent propensity toward what one may call "modernity." They were more likely to be adopters of innovative farm practices, to use modern health facilities rather than traditional medicine, to know about and practice family planning, to participate in various village organizations, to play the role of opinion leaders on public affairs, to use the national language, to engage in frequent interactions with other ethnic groups, to have higher aspirations for their children, to know about various development programs and talk about them, and to use their financial resources more rationally.

In analysis after analysis, we have found them to be people who had more education, who were in the higher economic groups, and who had the more desirable occupations, such as civil service and military positions. It is interesting that they consistently were also people who listened to the radio frequently, read newspapers and magazines, and in the few villages where television had become available, watched television. Some "modern" characteristics were found more prominently in one ethnic group than in others. The Confucians in West Kalimantan, for example, were most likely to use their financial resources for business investment. The Christians in North Sulawesi had a high level of participation in community organizations. These apparently reflect either occupational needs or cultural traits, rather than general modernity.

Over and above these scattered diverse tendencies, the consistent findings about education, economic status, occupations, and use of mass media seem to take on even greater significance. It is difficult, however, to assess the relative importance of these factors because they are all closely intertwined. Those who are heavy users of the media happen to be better educated, to have higher economic standing, and to be in the more desirable occupational categories. In our detailed statistical analysis we have found that a higher correlation with modernity sometimes went with one factor (e.g., education), sometimes with another (e.g., media use).

A few findings are noteworthy. Those who used the media more were clearly the ones who were more likely to have adopted agricultural innovations and who made more rational use of their financial resources. Both were related to economic life. The heavy users of mass media also had more knowledge about development programs and discussed them more with others. On the other hand, those who made more use of mass media seemed to be somewhat ambivalent in their assessment of whether traditions were still being upheld.

Our longitudinal research employing the method of before-and-after comparisons will be able to illustrate more conclusively the impact of one particular mass medium, television. Until that research is completed, we would like to discuss our findings in two related perspectives.

First, in real life it would probably be both infeasible and unrealistic to separate the effects of the various factors we have identified. Families that are better off tend to give their children more education. People who are better educated tend to have acquired certain skills that contribute to their material well-being and prepare them for better-paying jobs. They are also the ones who acquire the ability and habit of making more frequent use of the media and the information provided. Rather than try to establish one factor or another as the prime mover, we are inclined to think that all these factors together make them the kind of people they are. We may want to call them the more modern type.

Secondly, in a pragmatic sense, how can modernity be cultivated? If a government wants to promote modernity and development and knows that these are the major contributing factors, what practical steps can it take?

Some of the options can be immediately ruled out. The government cannot give everybody a civil service or military job. The government cannot bring everyone into the upper economic status group, though improving the standard of living would be one of the goals of development. Nor can the government induce people to change their religions. The impracticability of these options is indeed too absurd to be even worth considering.

There are only two practical options left. The government can and will improve the level of education. The Indonesian government is taking concrete steps toward this end. The government can and should popularize the use of mass media. The launching of the Palapa satellite for telecommunication and television broadcasting is a bold step in this direction. Our findings of highly consistent relationships between the use of mass media and social and economic development, while not to be taken as conclusive evidence, lend support to the decision to launch the Palapa satellite and suggest that investment in mass media can indeed contribute to development, especially if adequate precautions are taken in the planning of program content to minimize the undesirable side effects.

CORRECTIONS

1. On p. 49, delete the heading of Figure 5.3. The figure is 5.4.

2. On p. 121, the data on intermarriage between ethnic groups refers to any member of the family, not necessarily to the respondent himself or herself.

   The second sentence in the first paragraph should read:

   It amounts to just over 10 percent, if our sample is representative; that is, 10.4 percent of the families interviewed in this study had someone who was married to a member of another ethnic group.

   All the cross tabulations in this section refer to the respondents, who were not necessarily the persons engaged in intermarriage.

3. On p. 158, the second sentence in the second paragraph should read:

   While inter-ethnic marriages were practically nonexistent in the last generation, such bonds existed among about 10 percent of the families surveyed.